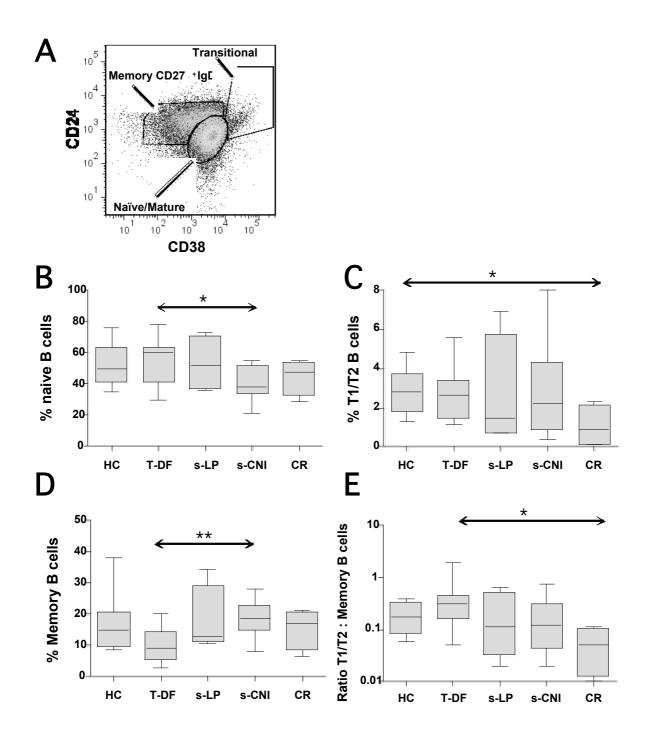
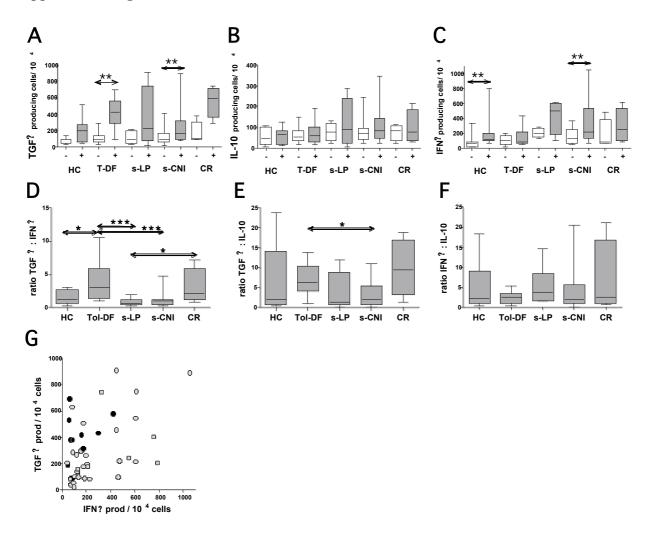
#### **Supplemental Figure 1**



**Supplemental Figure 1. Flow cytometry analysis of peripheral blood B cell subsets in** *training* **and** *test set* **patients.** (A) B cell subsets were analysed by gating on CD19<sup>+</sup> lymphocytes and defined as follows: late-memory B cells CD19<sup>+</sup>CD27<sup>+</sup>IgD<sup>-</sup>CD24<sup>+</sup>CD38<sup>-/int</sup>; naïve/mature B cells CD19<sup>+</sup>CD27<sup>-</sup>CD24<sup>int</sup>CD38<sup>int</sup>; T1/T2 transitional B cells CD19<sup>+</sup>CD27<sup>-</sup>CD24<sup>+</sup>CD38<sup>hi</sup>. Percentages of naïve B cells (B), T1/T2 transitional B cells (C) and memory B cells (D) of total B cells. Ratio of the percentage of T1/T2 transitional: memory B cells (E). Box-plots show median and interquartile range. Whiskers above and below the box indicate the 5<sup>th</sup> and 95<sup>th</sup> percentiles. When significant, p

values for 2-tailed Mann-Whitney U test comparisons between groups are shown (\* p<0.05, \*\* p<0.01).

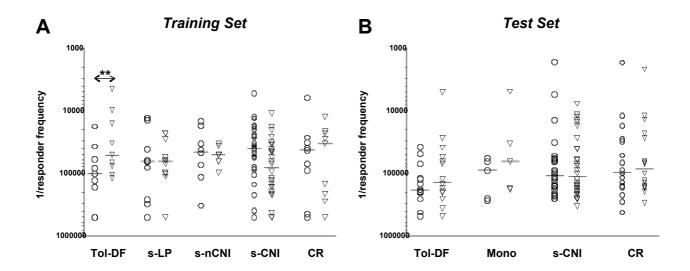
## **Supplemental Figure 2**



**Supplemental Figure 2. Analysis of B cell cytokine production by intracellular cytokine staining.** B cell production of (A) TGF\_, (B) IL-10 and (C) IFN\_ was assessed by intracellular cytokine staining after *in vitro* stimulation of PBMC with phorbol 12-myristate 13-acetate and ionomycin. Results are expressed as the number of cytokine producing B cells (gated on CD19<sup>+</sup> lymphocytes) detected per 1x10<sup>4</sup> B cells analysed by flow cytometry in stimulated (+) and unstimulated (-) cultures, with median and interquartile range shown for each group. Whiskers above and below the box indicate the 5<sup>th</sup> and 95<sup>th</sup> percentiles. Figures (D-F) show the number of cytokine producing cells per 1x10<sup>4</sup> stimulated B cells expressed as a ratio of each cytokine response. Figure G shows TGF\_ and IFN\_ cell cytokine responses, where each patient is represented by a filled circle and black filled circles represent Tol-DF patients, showing that B cells of Tol-DF patients have a higher capacity to produce TGF\_ rather than IFN\_. P values for Wilcoxon-matched pair test (A-C) and 2-tailed Mann-Whitney U test comparisons between groups

(D-F) are shown (\*p<0.05, \*\*p<0.01, \*\*\*p<0.001). Sample n: HC=8, Tol-DF=10, s-LP=8, s-CNI=16, CR=4.

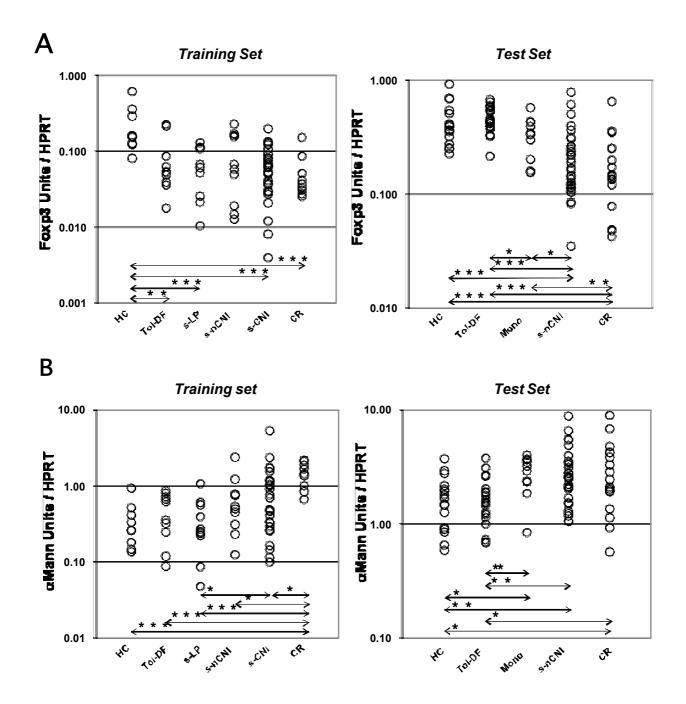
### **Supplemental Figure 3**



#### **Supplemental Figure 3**

Assessment of direct pathway alloresponses in renal transplant patient groups by IFN\_ELISpot analysis. Cellular functional assays detecting direct pathway alloresponses by IFN\_ELISpot in the (A) *training* and (B) *test sets*. The number of IFN\_ producing cells in recipient CD4<sup>+</sup> T cells was calculated. Data shows the frequency (1 responder / n cells) and median group frequency (black bar) of T cell responses to donor APCs (\_ anti-Donor response) or equally mismatched 3<sup>rd</sup> Party APCs (santi-3<sup>rd</sup>P response) after deducting background. Two-sided p values for Wilcoxon-matched paired test (\*\* p<0.01) between donor and 3<sup>rd</sup>P frequencies is shown.

# **Supplemental Figure 4**



Supplemental Figure 4. QRT-PCR gene expression analysis of peripheral blood expression of FoxP3 and  $\alpha$ -1,2-mannosidase. QRT-PCR analysis of (A) FoxP3 and (B)  $\alpha$ -1,2-mannosidase expression in whole peripheral blood samples of the *training* and *test sets*. Expression levels of FoxP3 and  $\alpha$ -1,2-mannosidase are expressed as units relative to the expression of HPRT. When significant, p values for 2-tailed Mann-Whitney U test comparisons between groups are shown (\* p<0.05, \*\* p<0.01, \*\*\* p<0.001).

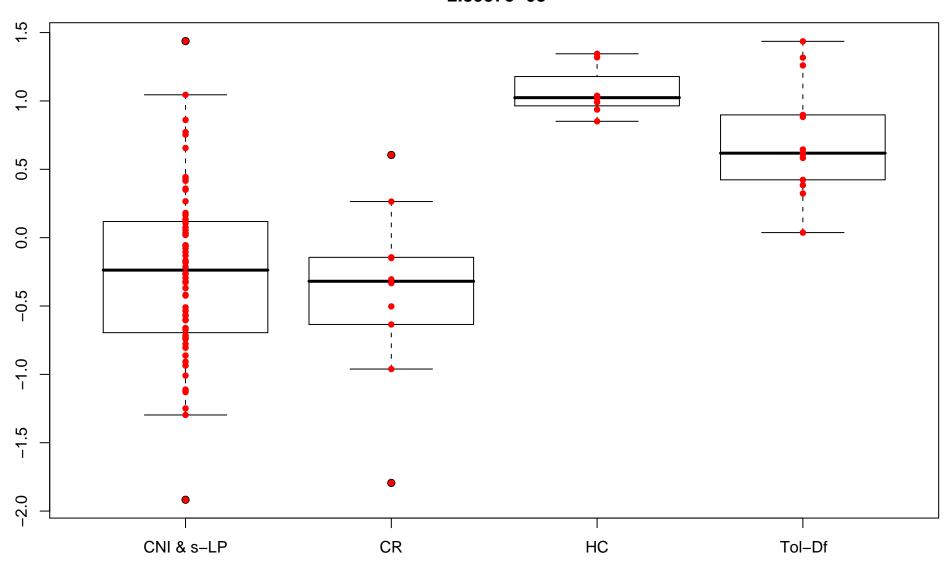
Supplemental Figure 5. Median of log-fold change in expression of all probes identified with significant differential expression in patient groups of the *training* and *test sets*. Plots showing the median of log-fold change in expression (relative to median of all samples) of differentially expressed probes for each patient group of the (A) *training* and (B) *test sets*, for all probes detected to be significantly differentially expressed by microarray analysis when ranked on 1% FDR. Box-

plots show median and interquartile range. Whiskers above and below the box indicate the 5<sup>th</sup> and

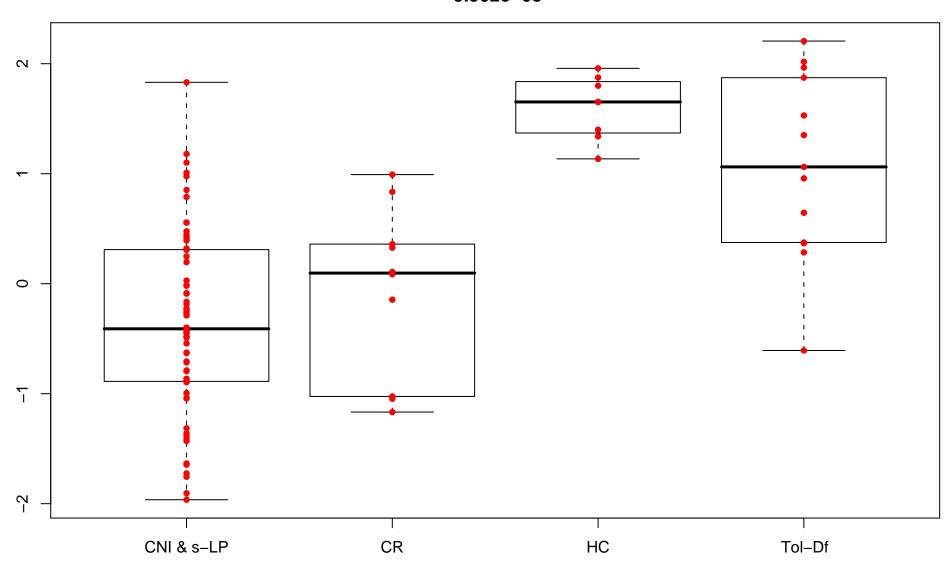
95<sup>th</sup> percentiles.

# Figure 5A

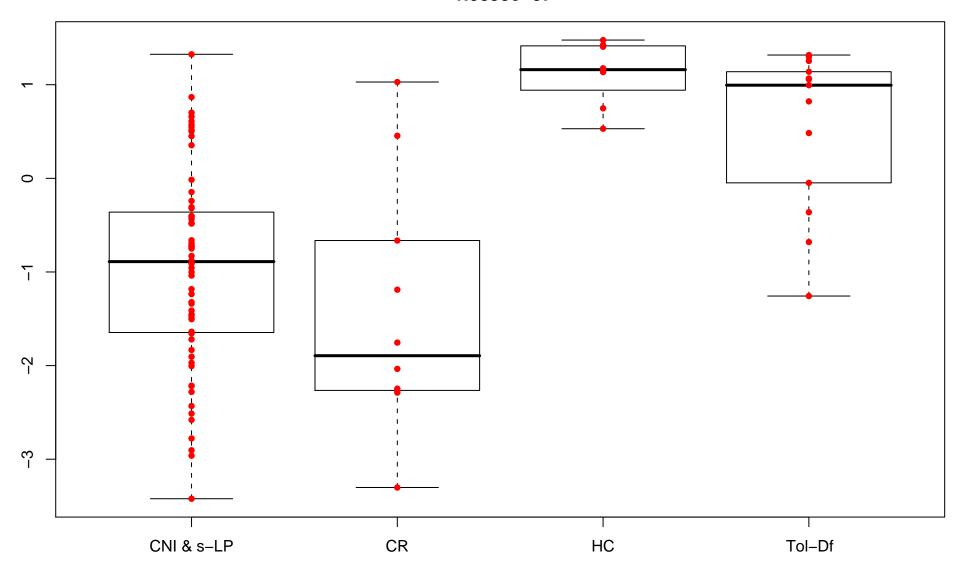
Rank 1: CD79B 2.8957e-08



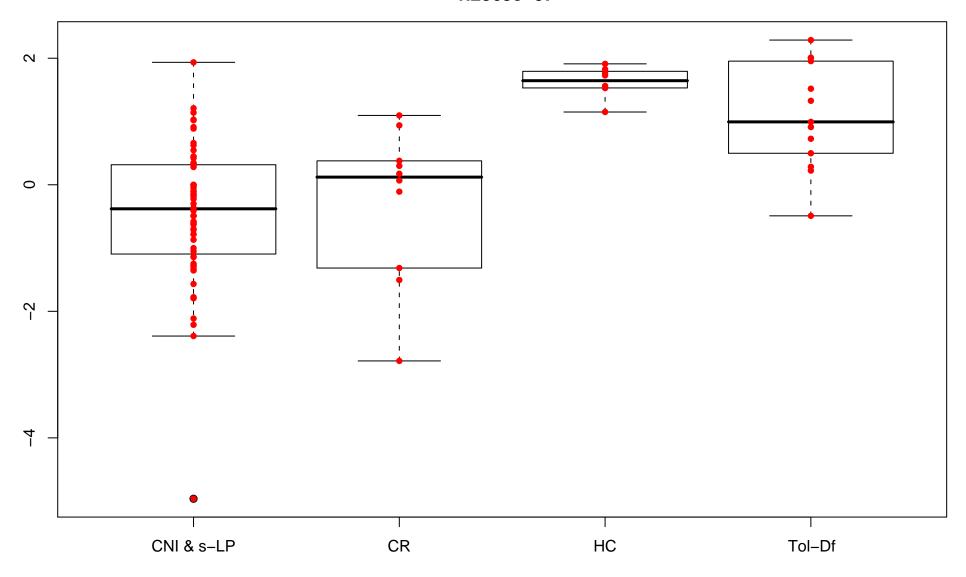
Rank 2: TCL1A 9.502e-08



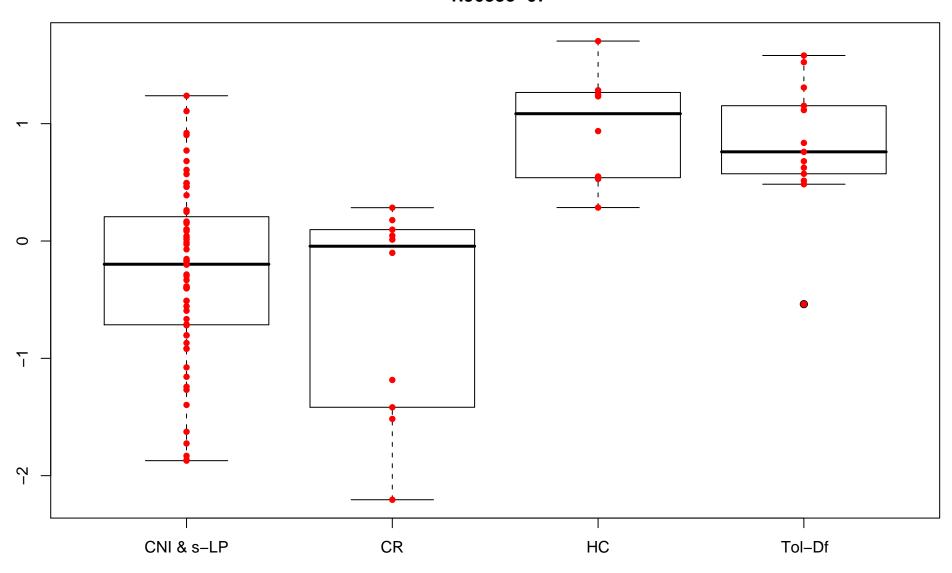
Rank 3: HS3ST1 1.0893e-07



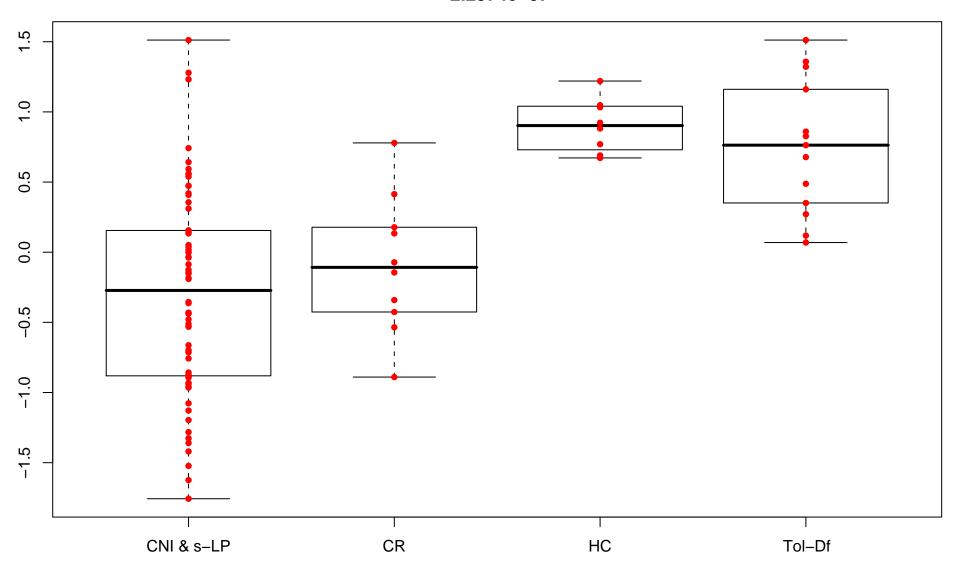
Rank 4: TCL1A 1.2363e-07



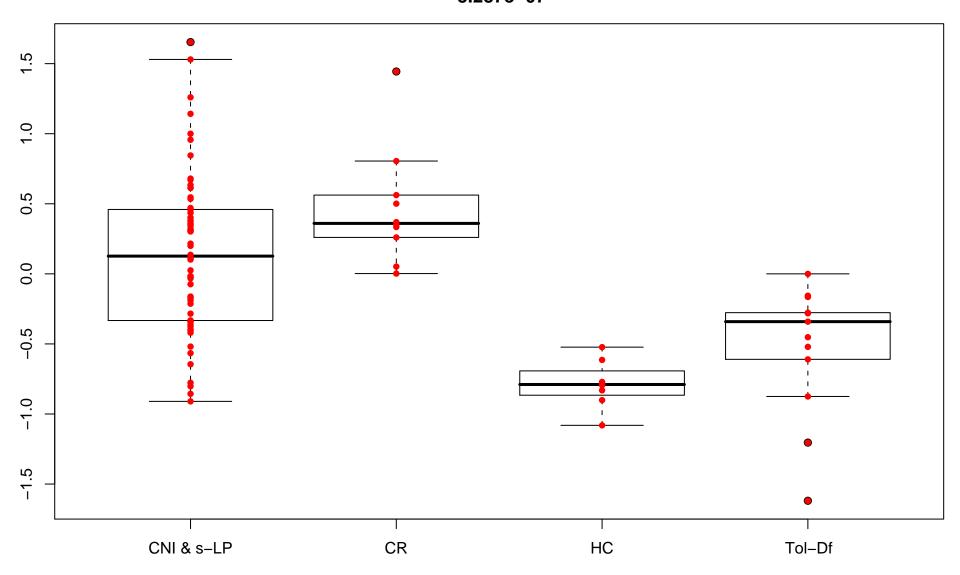
Rank 5 : SH2D1B 1.9033e-07



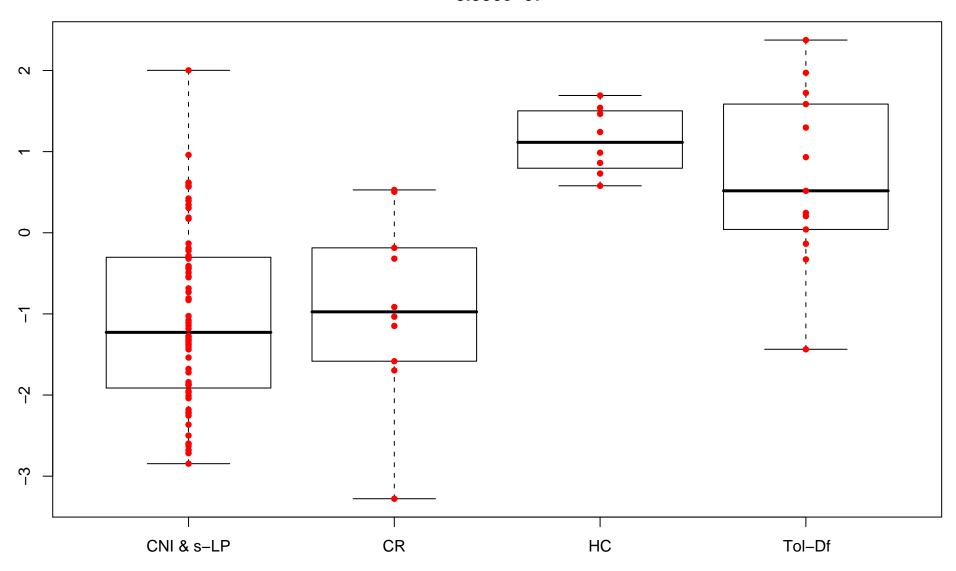
Rank 6: MS4A1 2.2974e-07



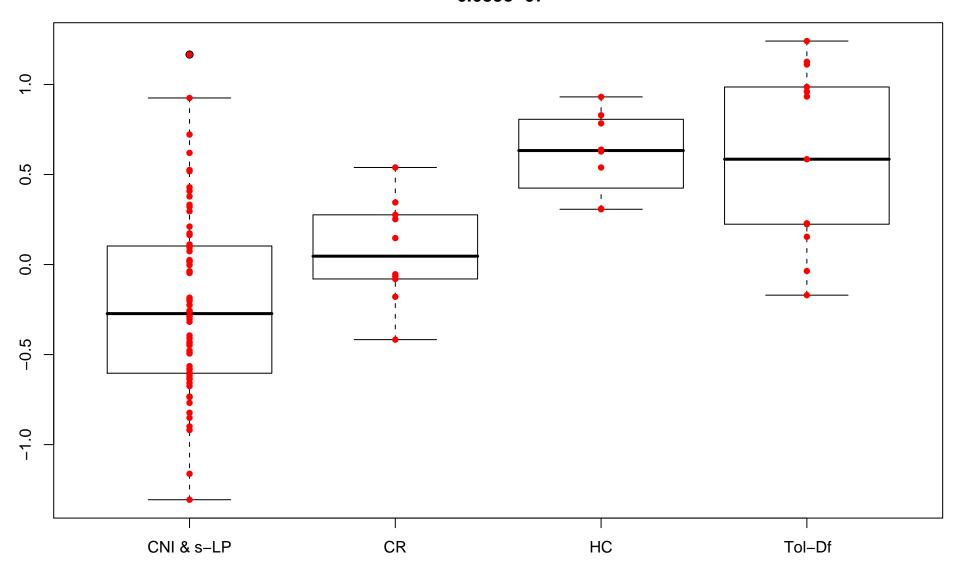
Rank 7: TLR5 3.287e-07



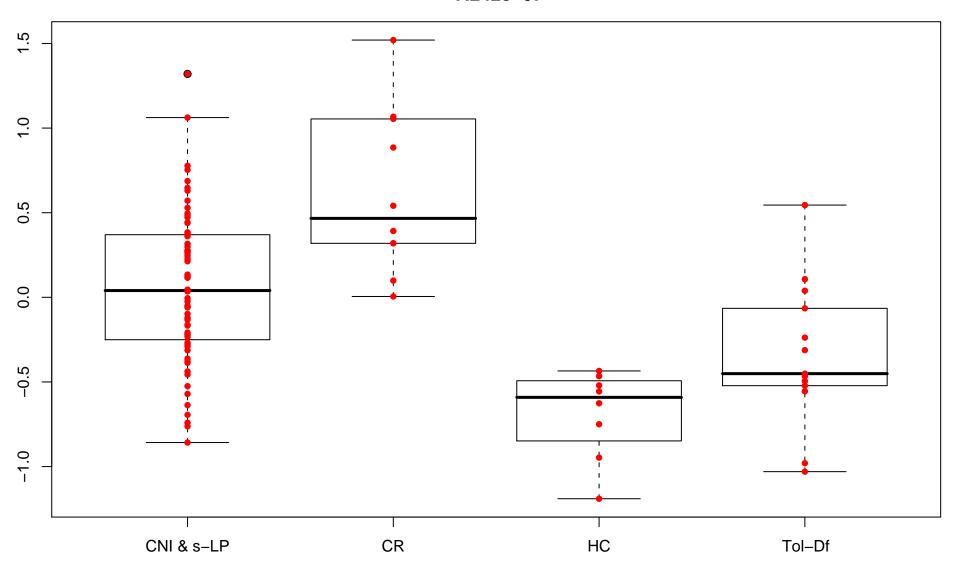
Rank 8: THC2438936 3.336e-07



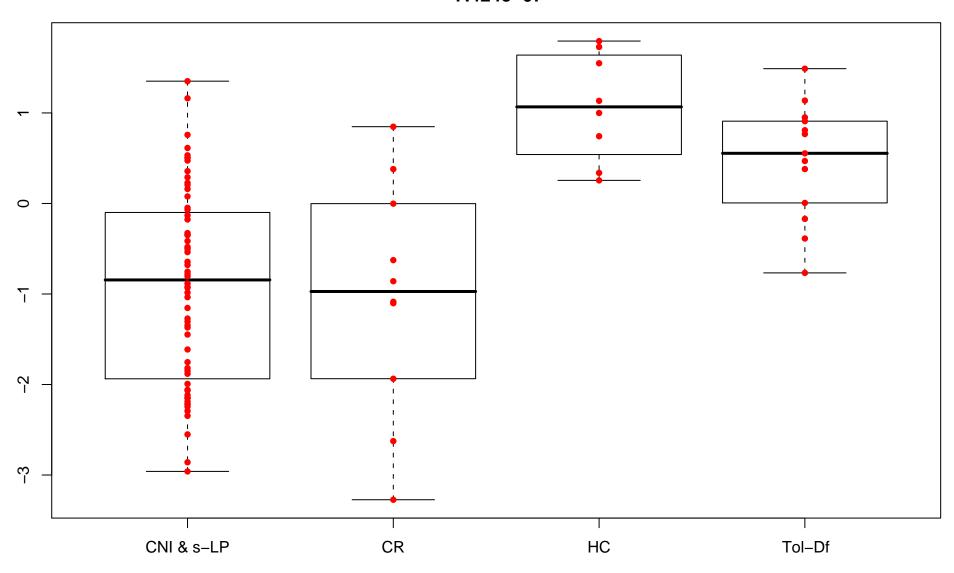
Rank 9: PNOC 6.035e-07



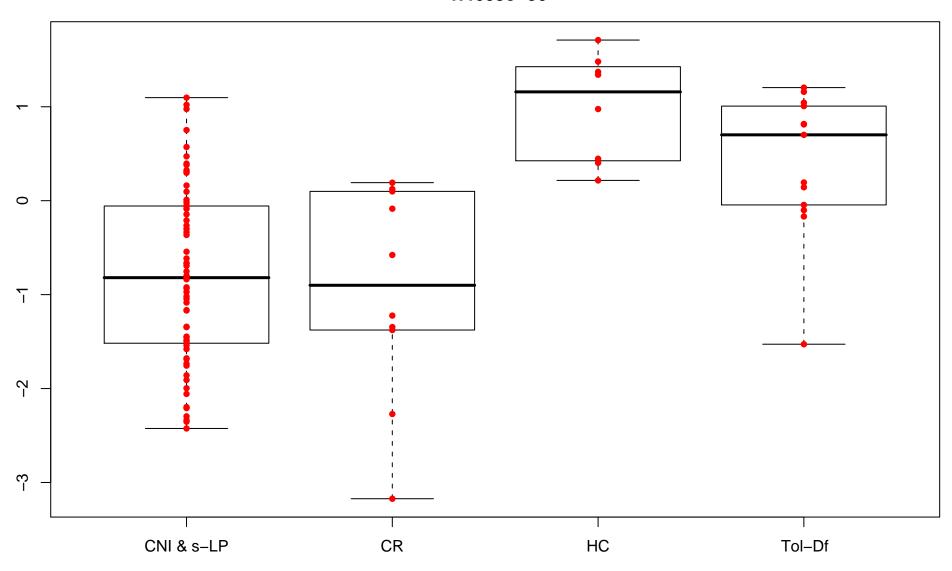
Rank 10 : SLC8A1 7.242e-07



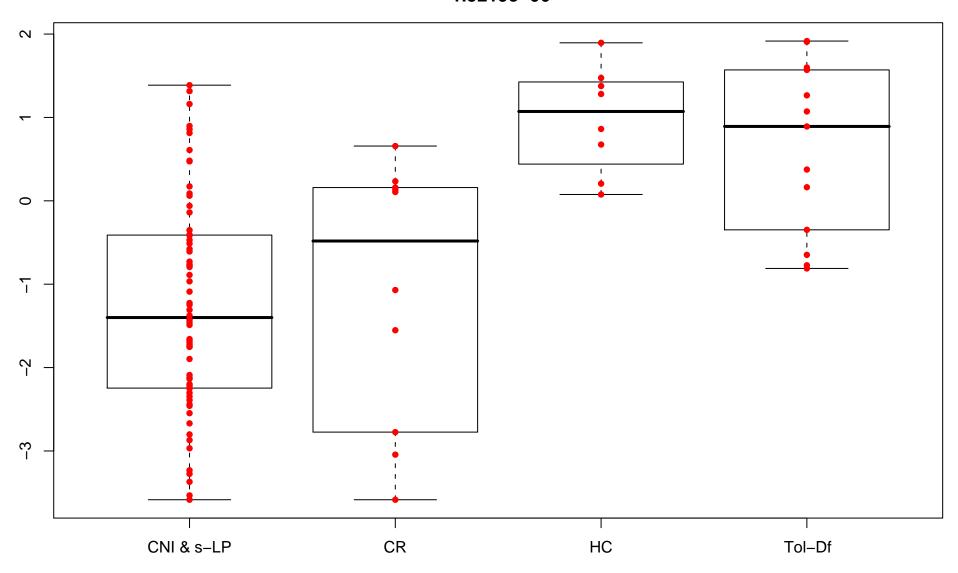
Rank 11 : FCRL2 7.424e-07



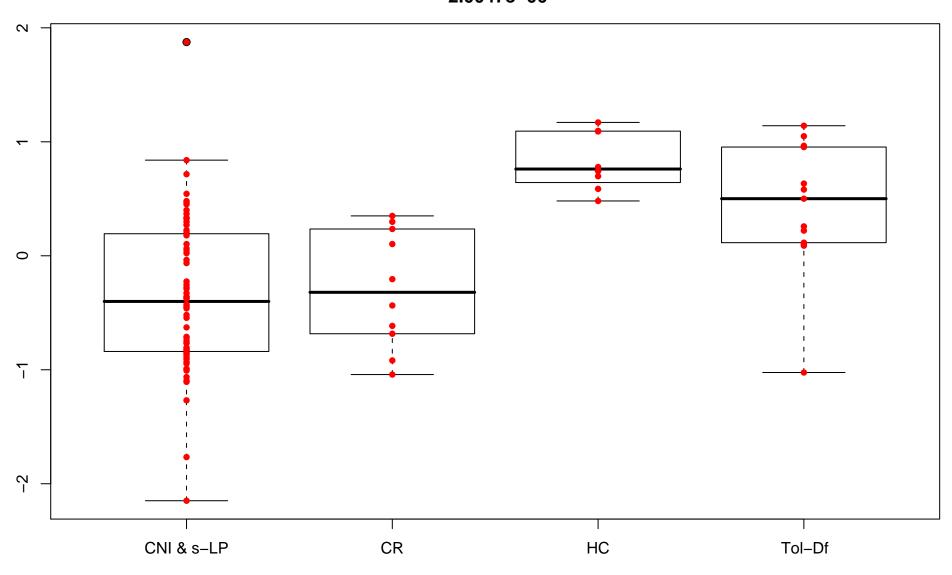
Rank 12 : BLK 1.4605e-06



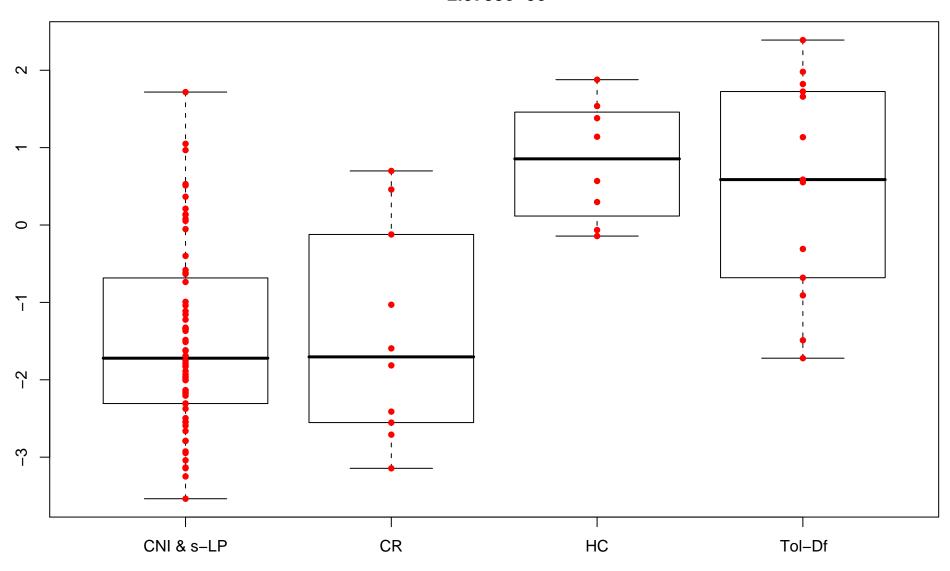
Rank 13: PCDH9 1.5219e-06



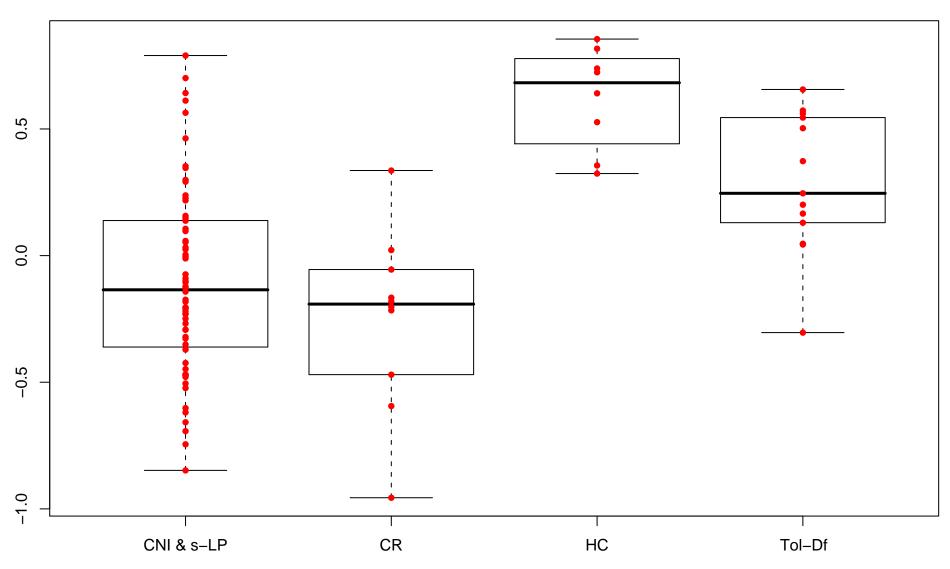
Rank 14 : CD200 2.0047e-06



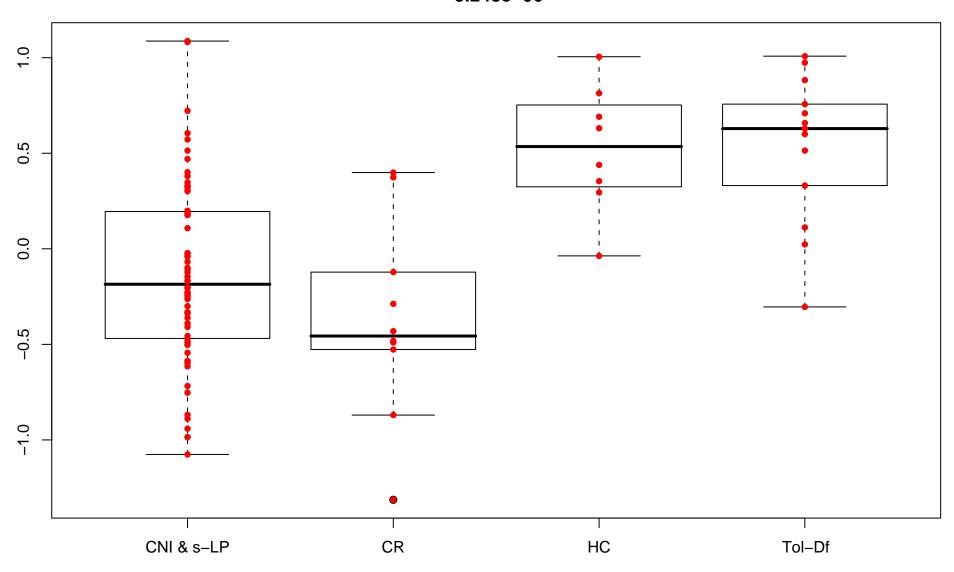
Rank 15 : THC2317432 2.0735e-06



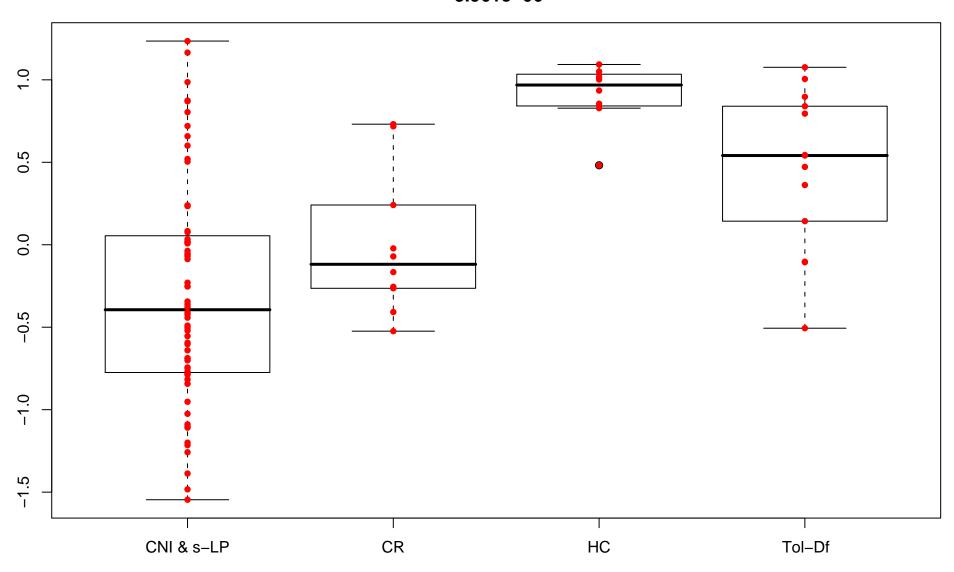
Rank 16 : BCL11A 2.2103e-06



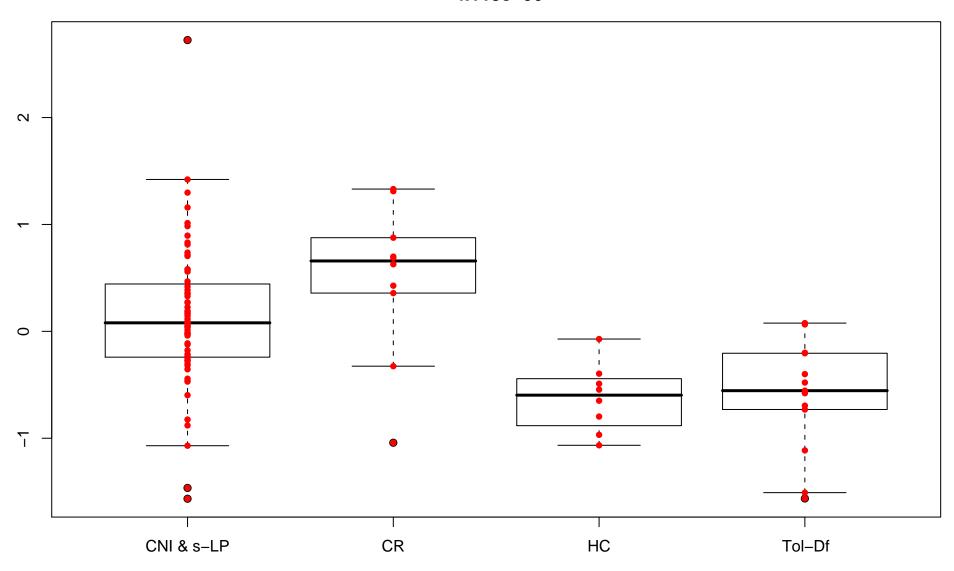
Rank 17: TSPAN3 3.248e-06



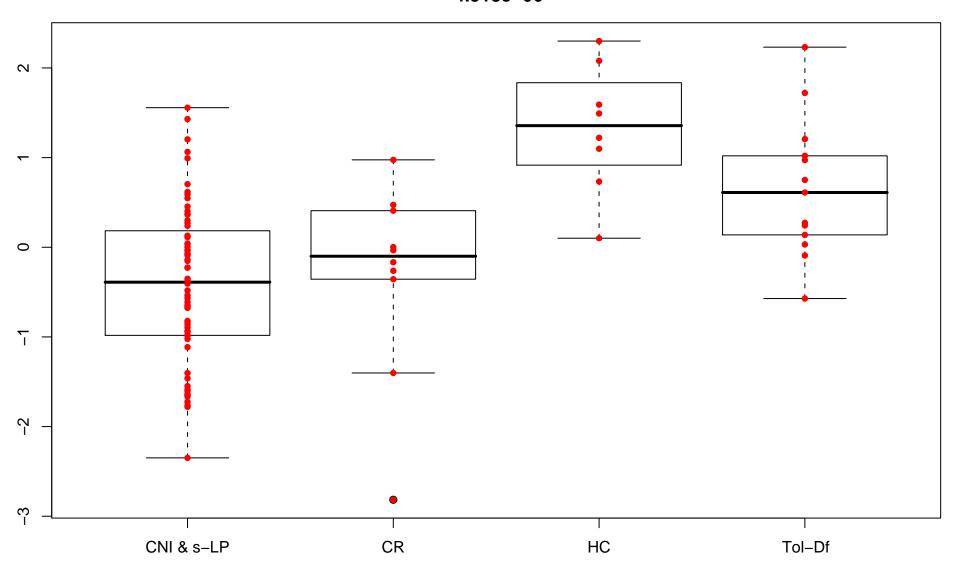
Rank 18: CD79A 3.961e-06



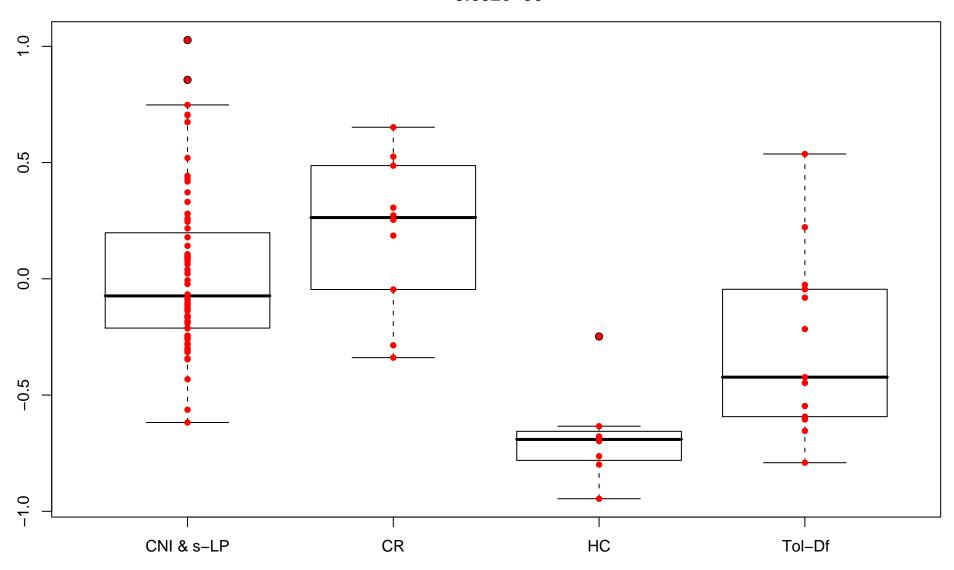
Rank 19: CASP5 4.113e-06



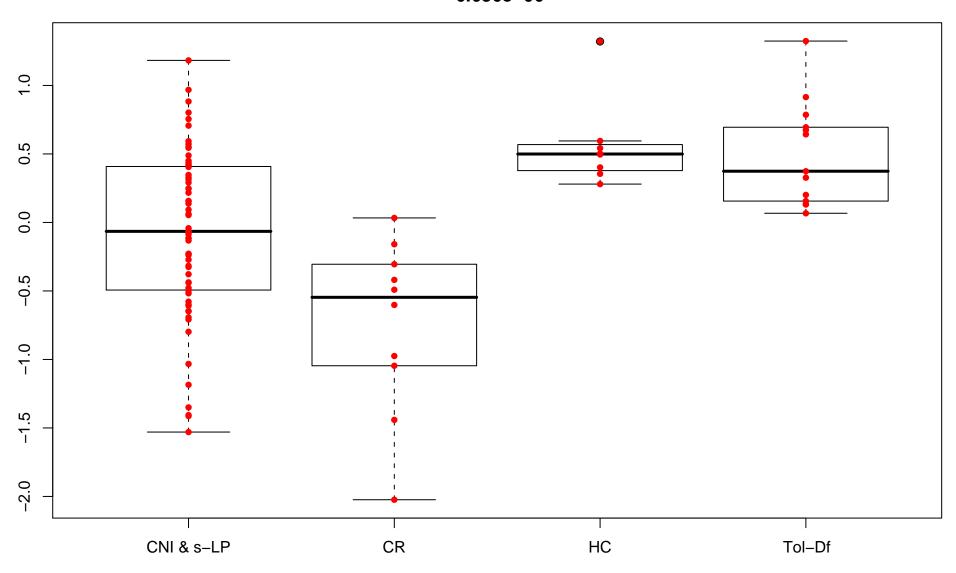
Rank 20 : FCRL5 4.518e-06



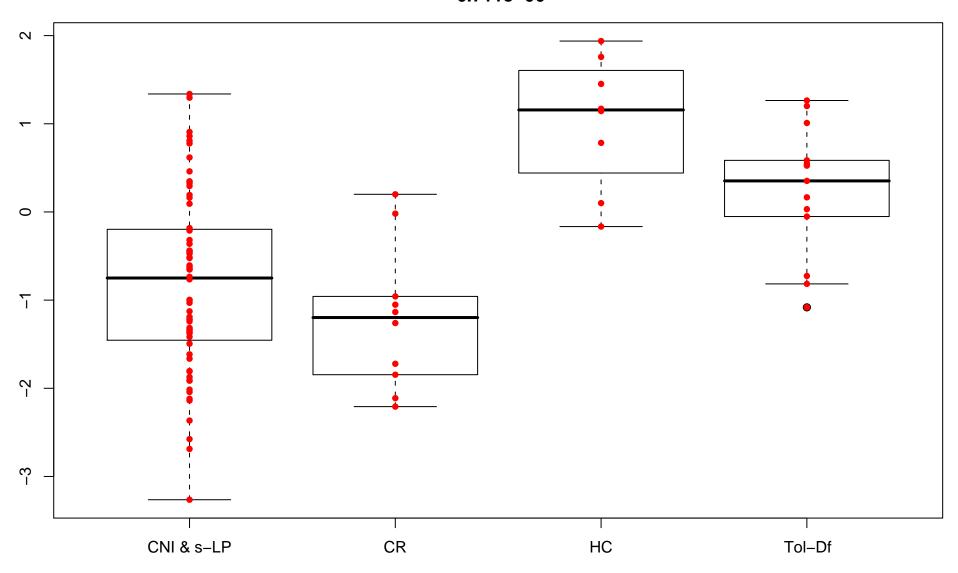
Rank 21 : IL1RL2 5.652e-06



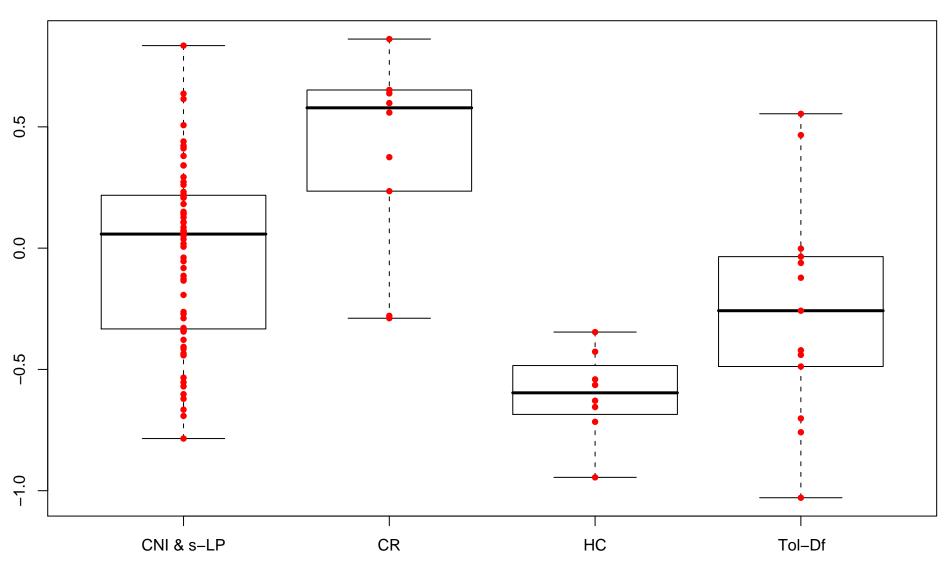
Rank 22 : EBI2 6.636e-06



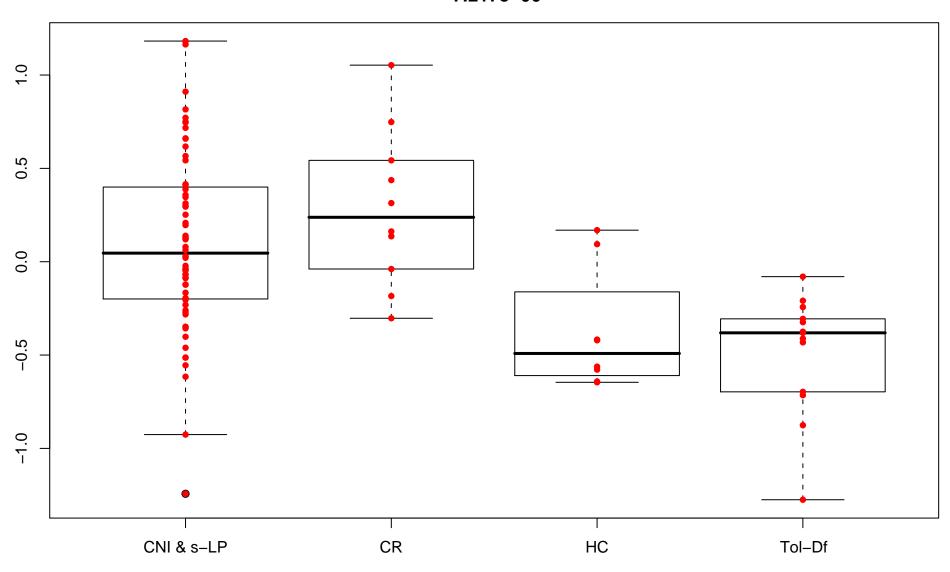
Rank 23 : BLNK 6.711e-06



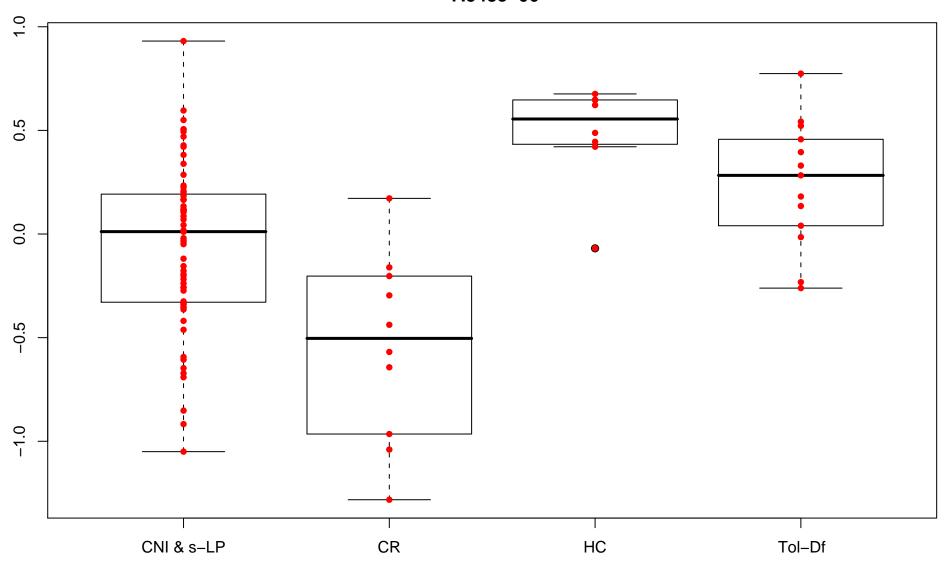
Rank 24 : THC2340114 7.154e-06



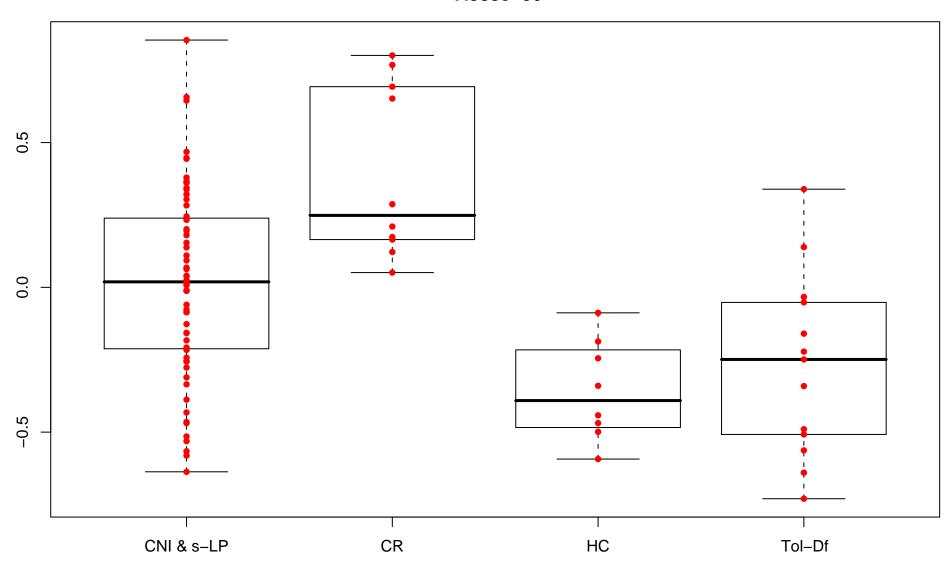
Rank 25 : RNF24 7.217e-06



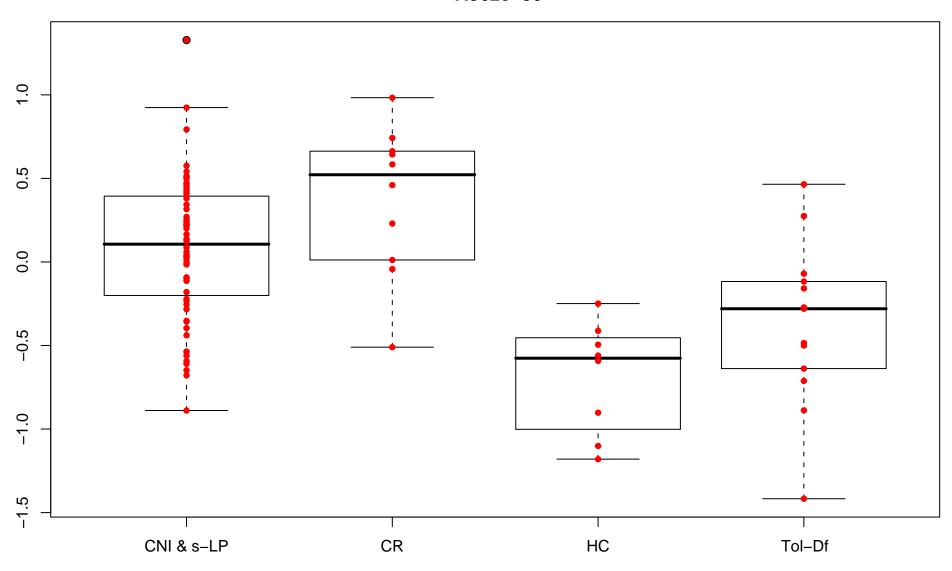
Rank 26 : DIMT1L 7.548e-06



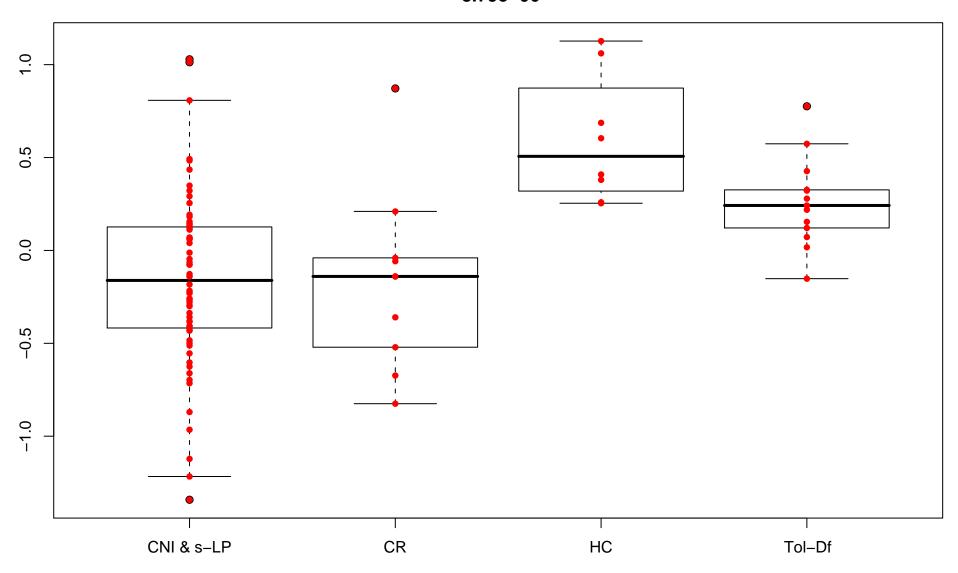
Rank 27 : EPO 7.588e-06



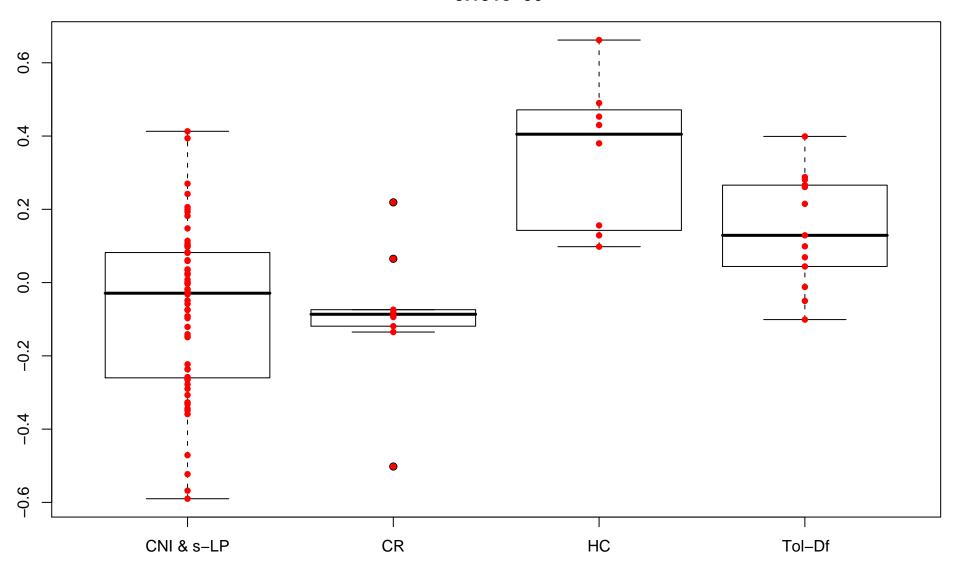
Rank 28 : ZAK 7.962e-06



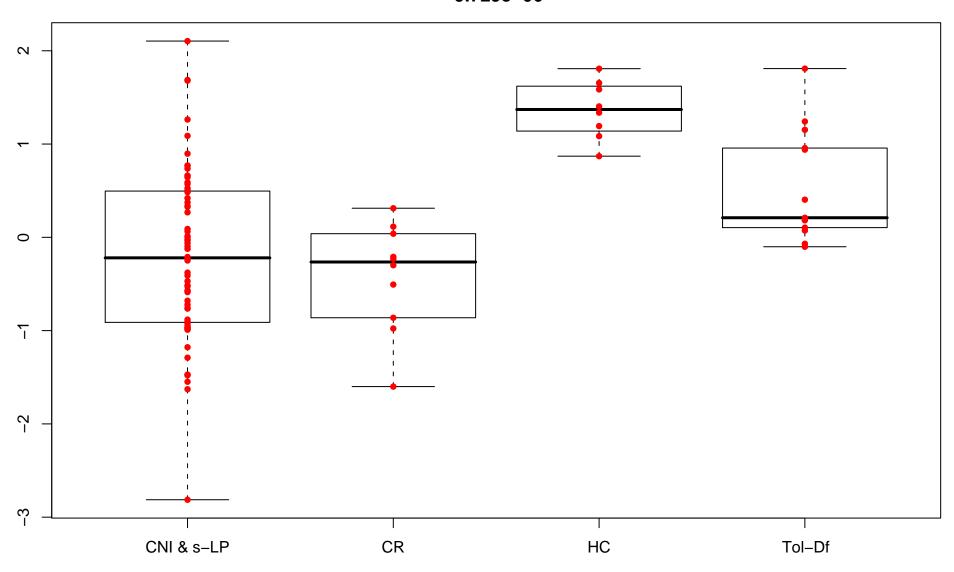
Rank 29 : CD40 8.79e-06



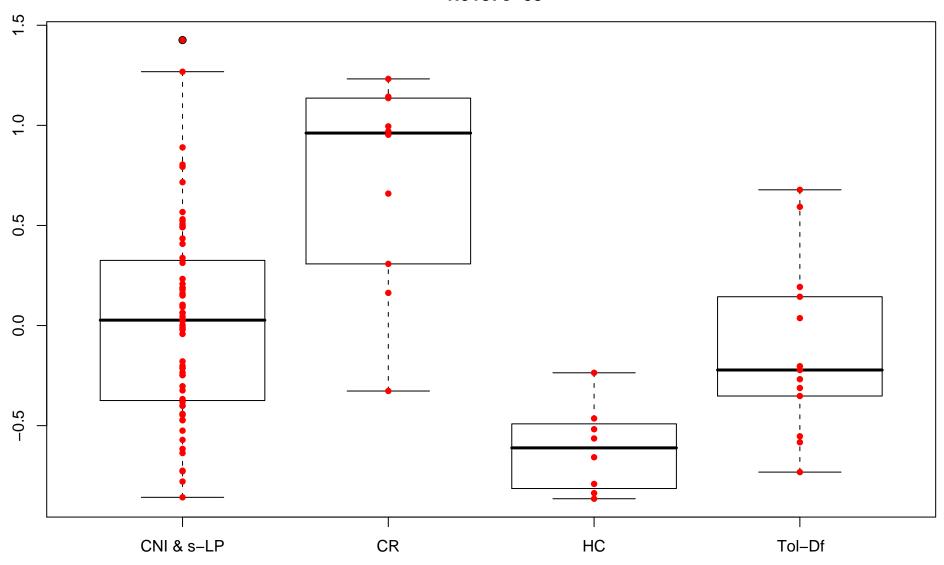
Rank 30 : CREB3L4 9.191e-06



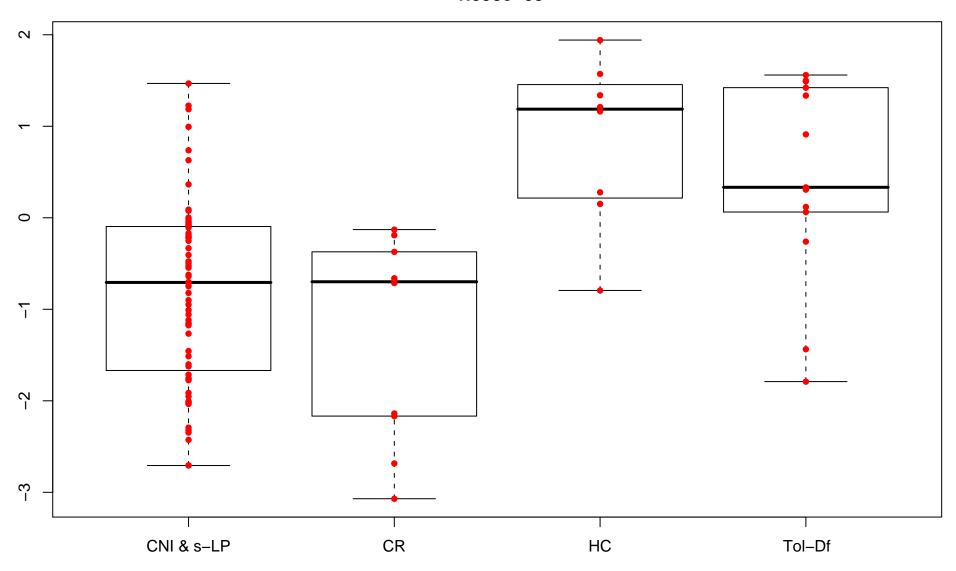
Rank 31: IGHM 9.729e-06



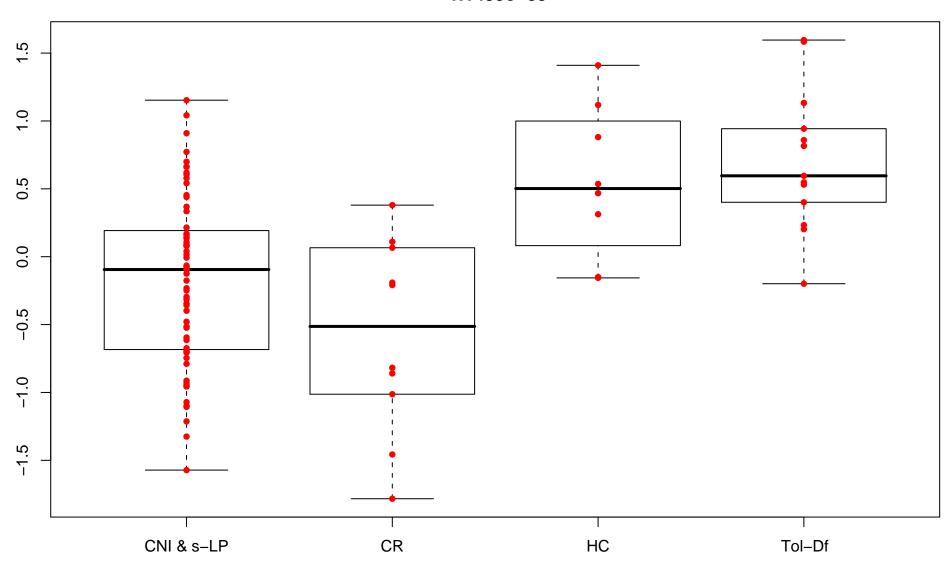
Rank 32: ADAM17 1.0187e-05



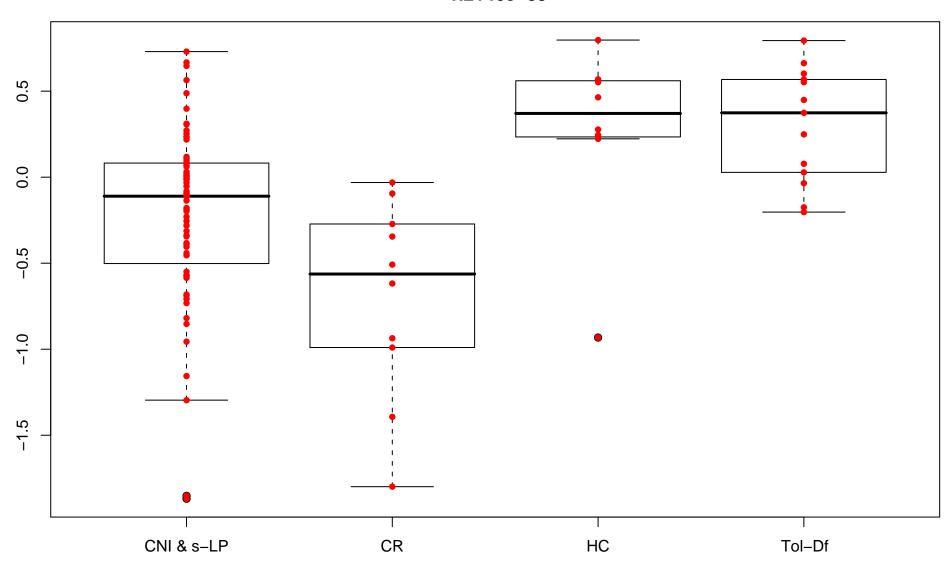
Rank 33 : SH2D1B 1.098e-05



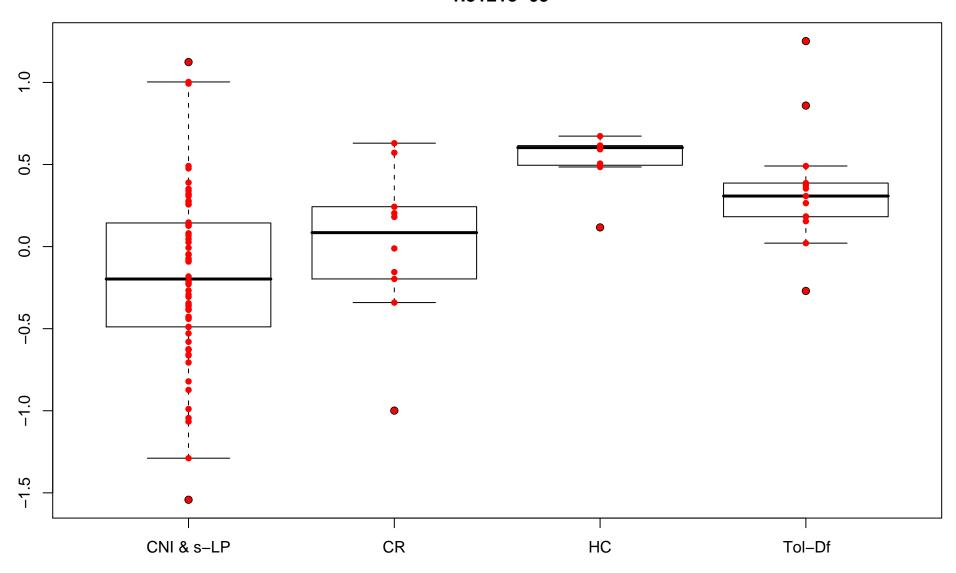
Rank 34 : AKR1C3 1.1499e-05



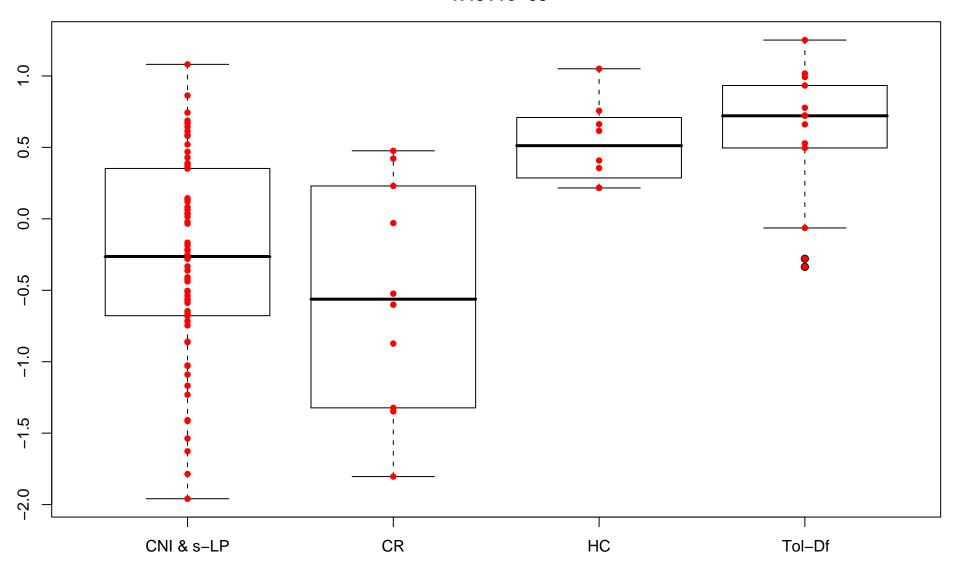
Rank 35 : CASD1 1.2146e-05



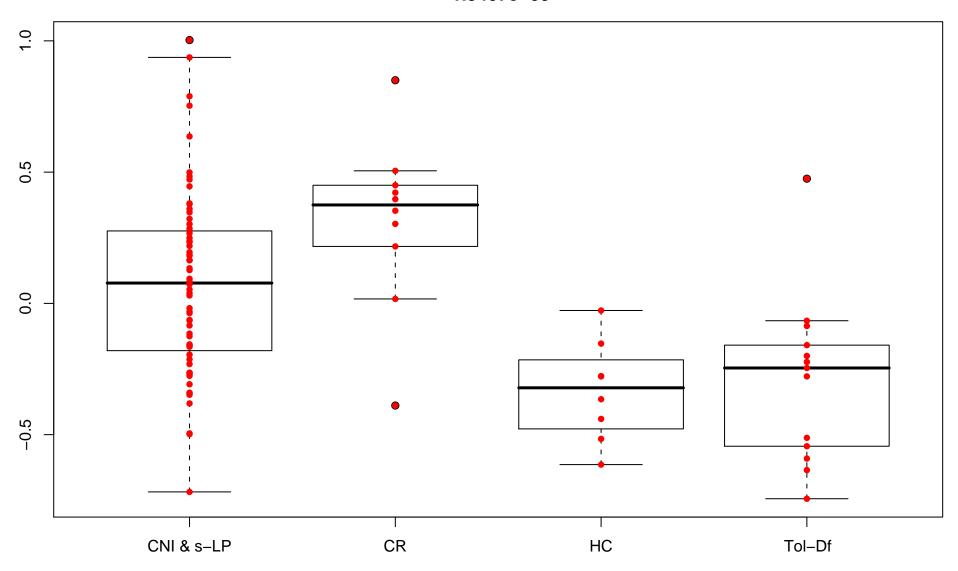
Rank 36: FCRLA 1.3121e-05



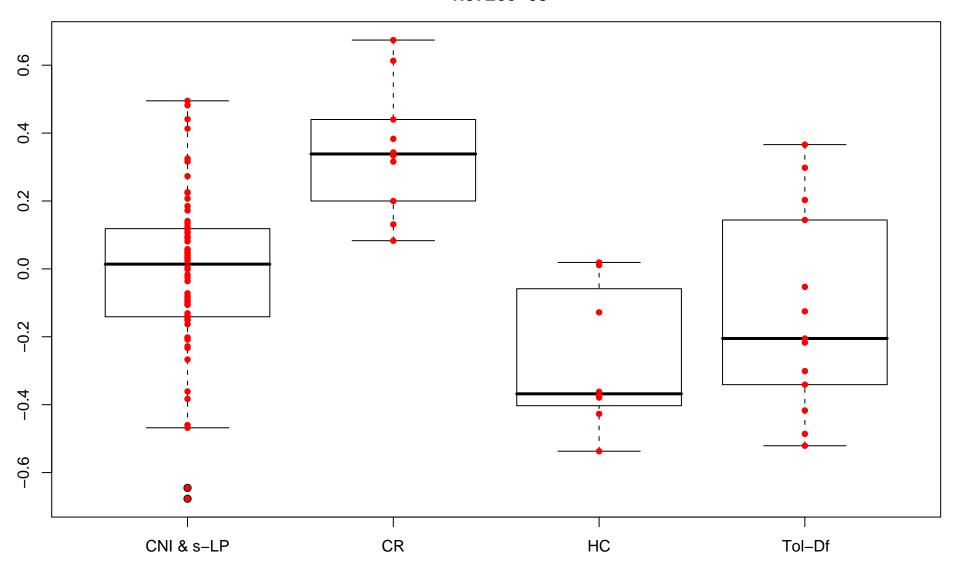
Rank 37 : BTLA 1.4511e-05



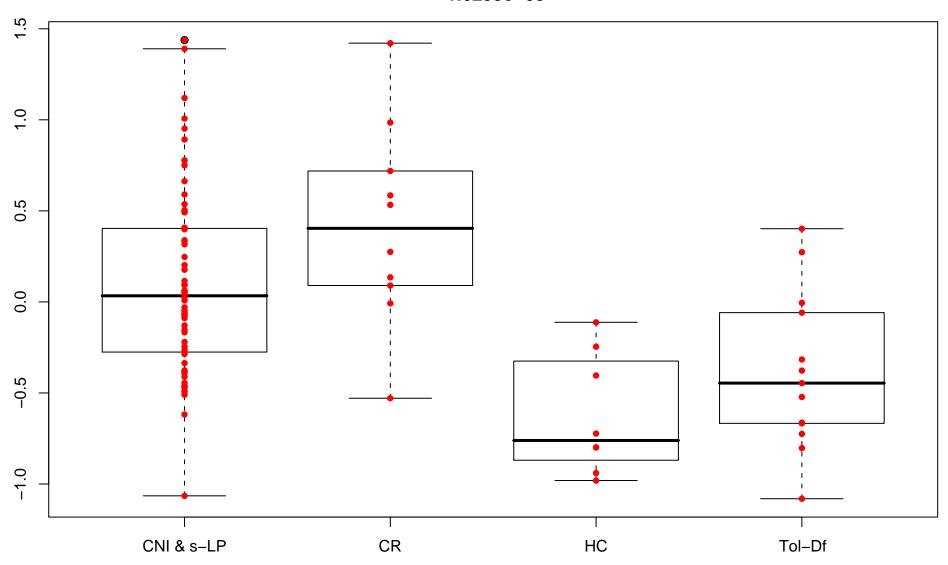
Rank 38 : COL4A3BP 1.5407e-05



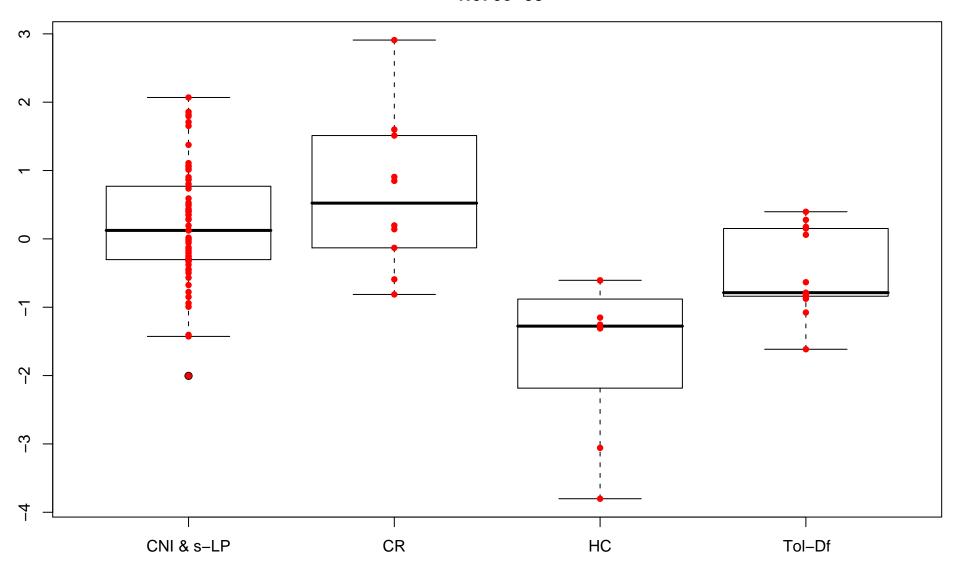
Rank 39 : CLCN5 1.5726e-05



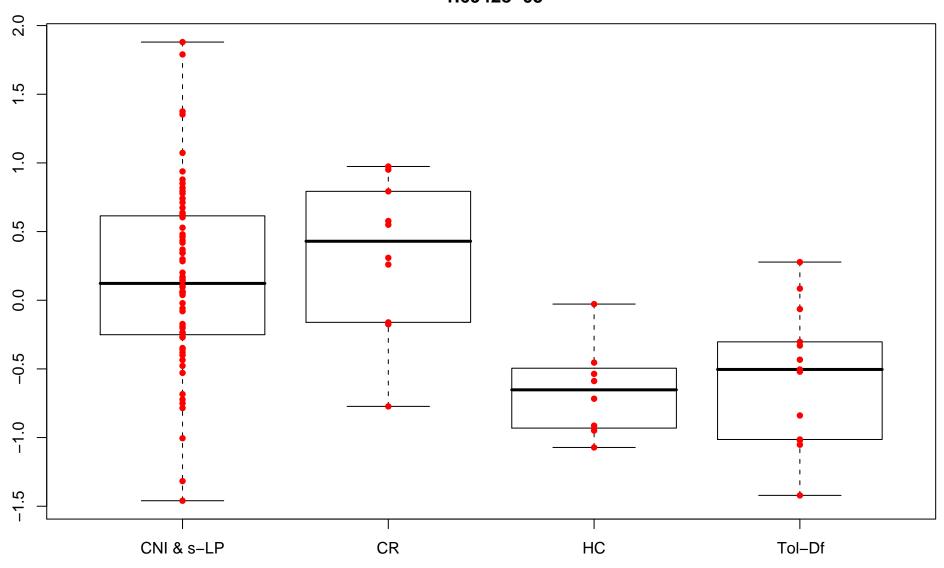
Rank 40 : LHFPL2 1.6299e-05



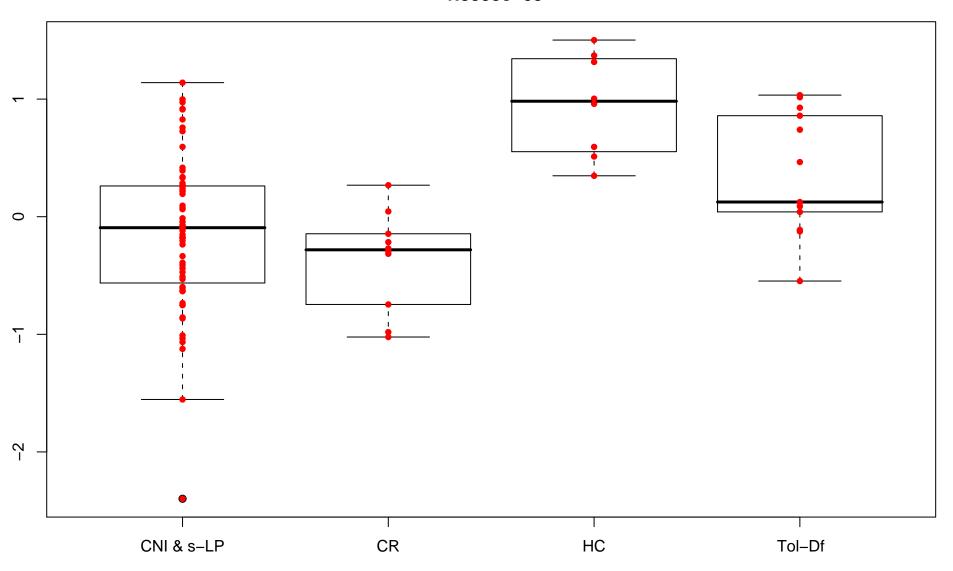
Rank 41 : ARG1 1.676e-05



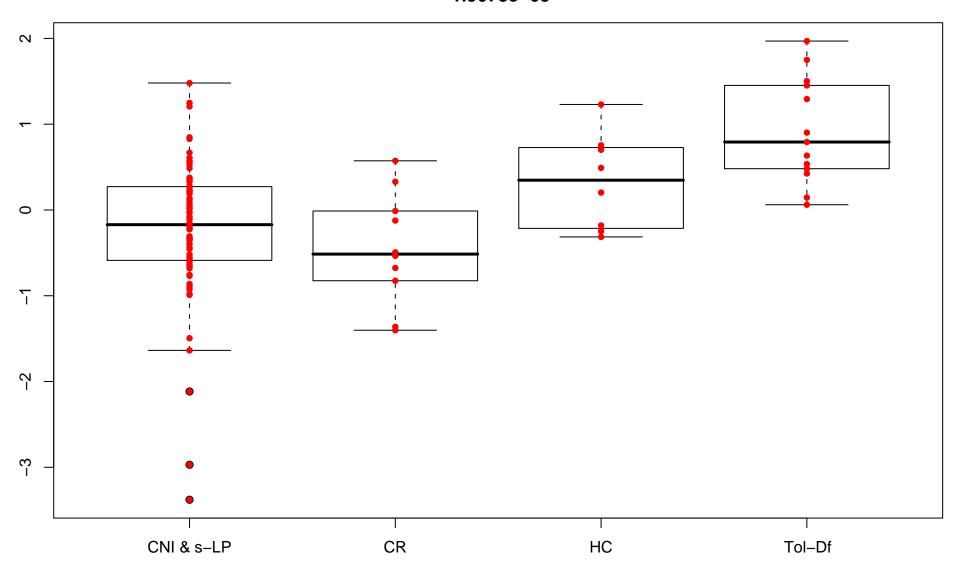
Rank 42: ANXA3 1.6942e-05



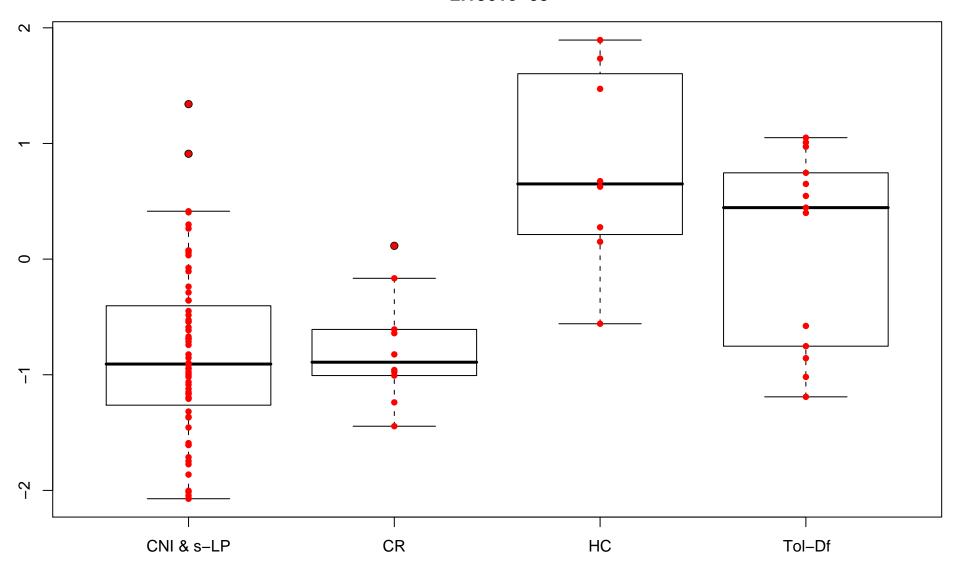
Rank 43 : HLA-DOA 1.8553e-05



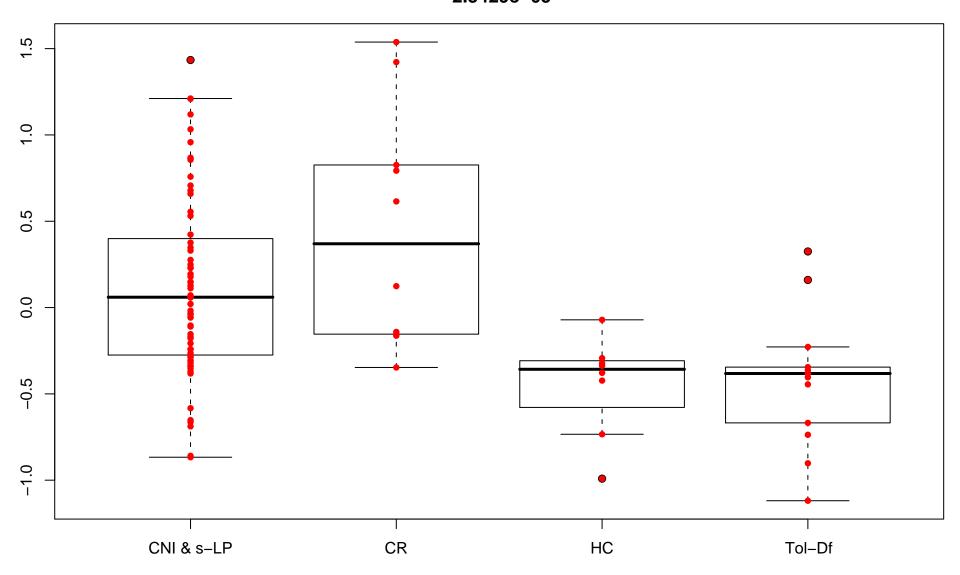
Rank 44 : KLRF1 1.9078e-05



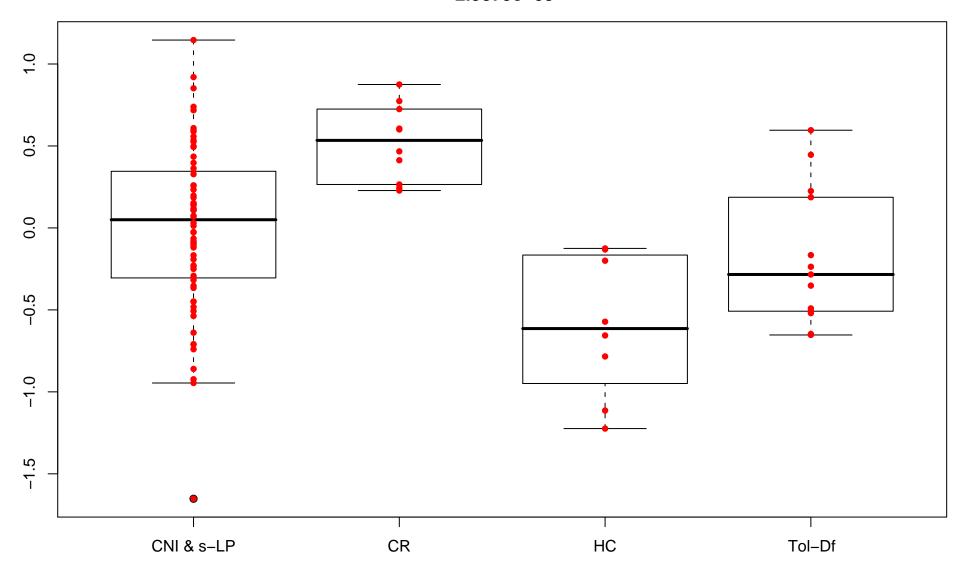
Rank 45 : CD22 2.1561e-05



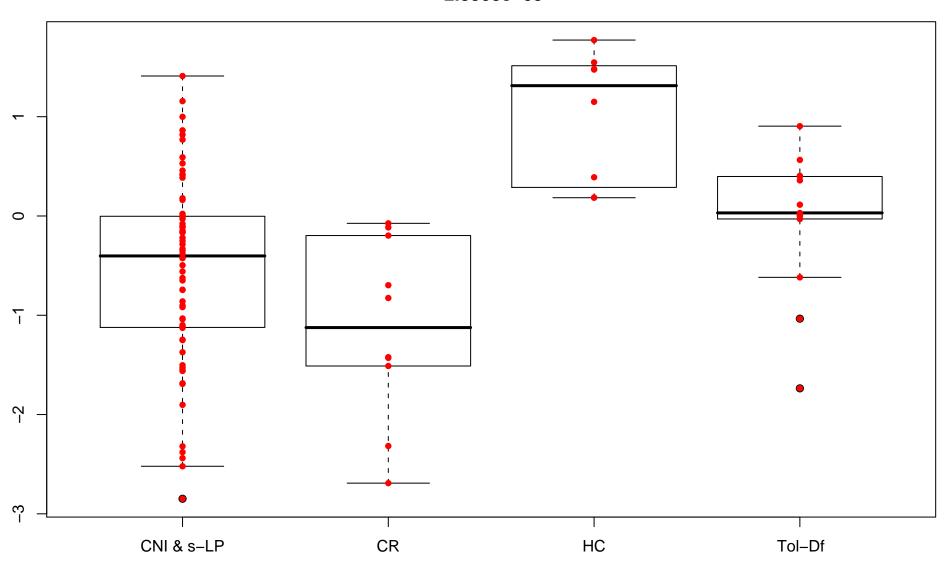
Rank 46: TLR2 2.3429e-05



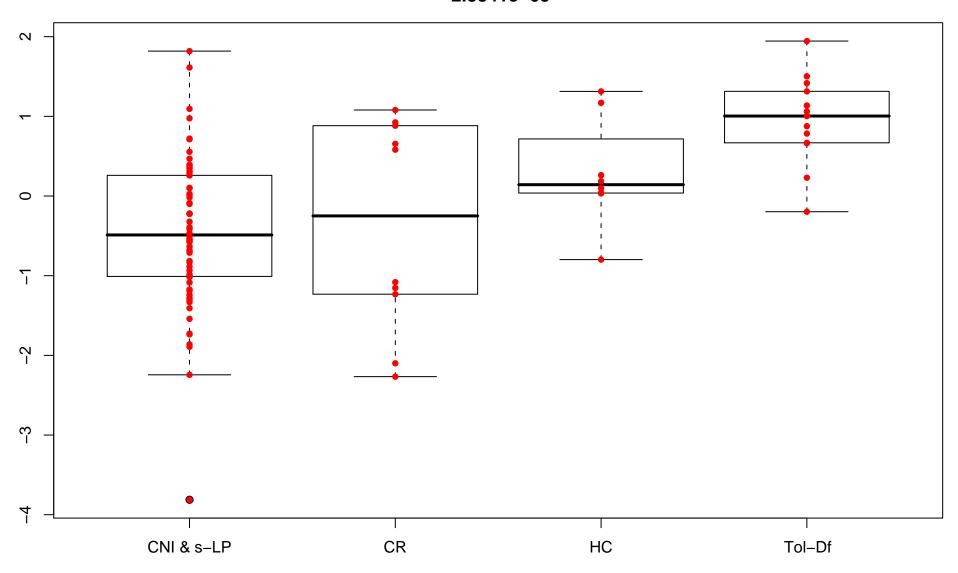
Rank 47: PLXDC2 2.5879e-05



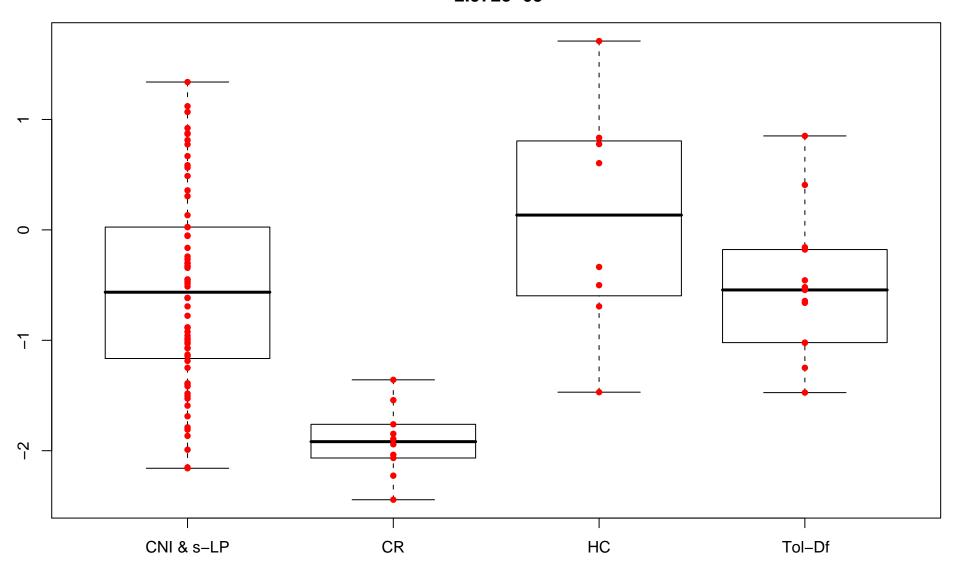
Rank 48 : BCL7A 2.8508e-05



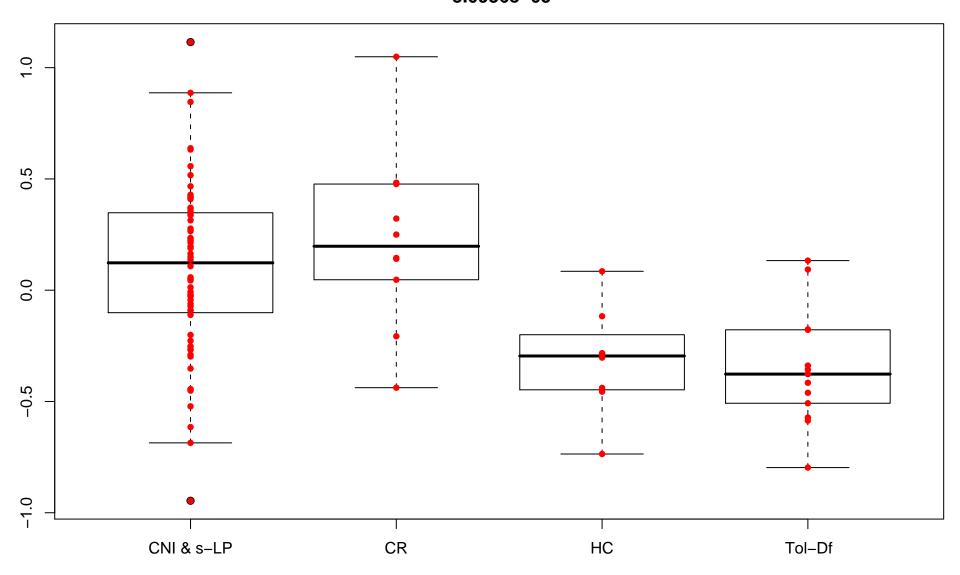
Rank 49: VMO1 2.8841e-05



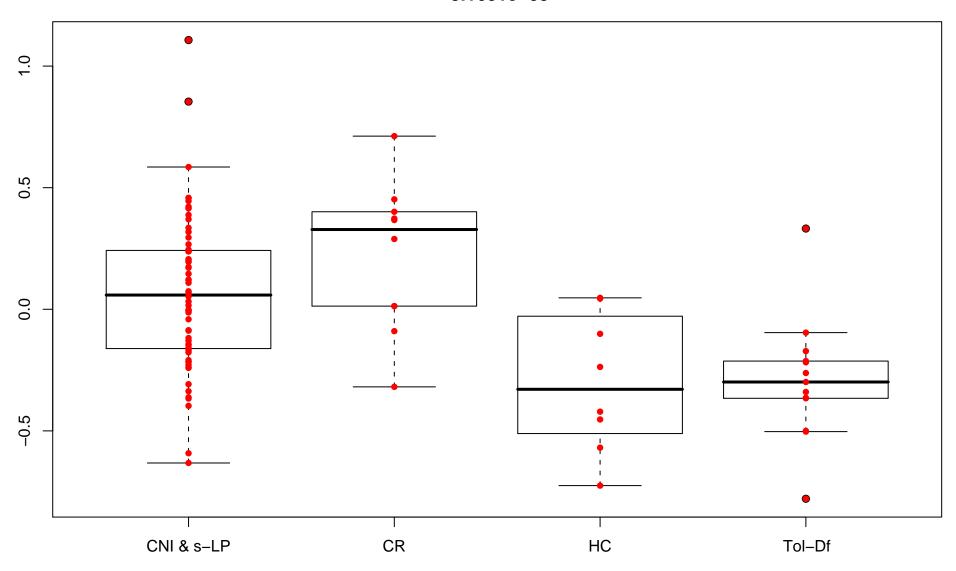
Rank 50 : ADAMTS4 2.972e-05



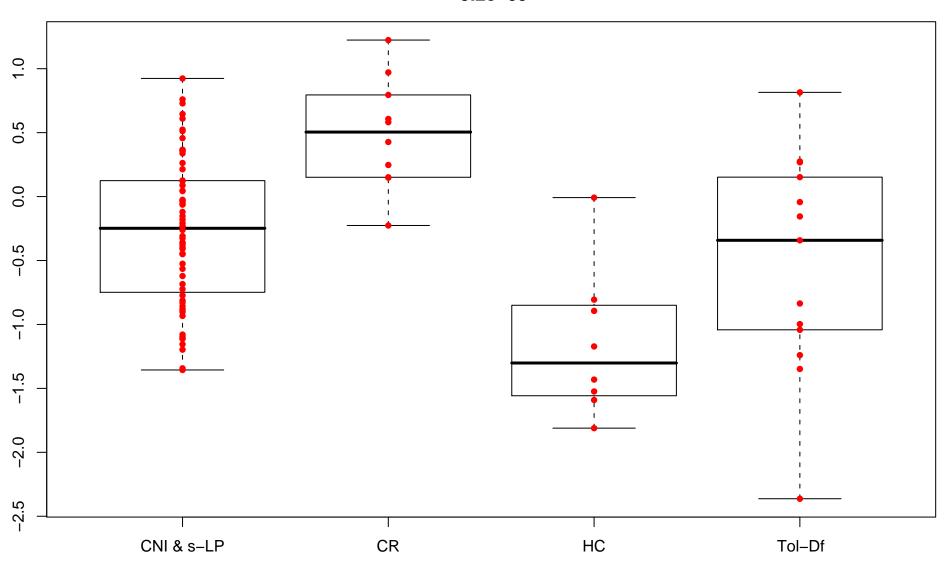
Rank 51: PTPRJ 3.0936e-05



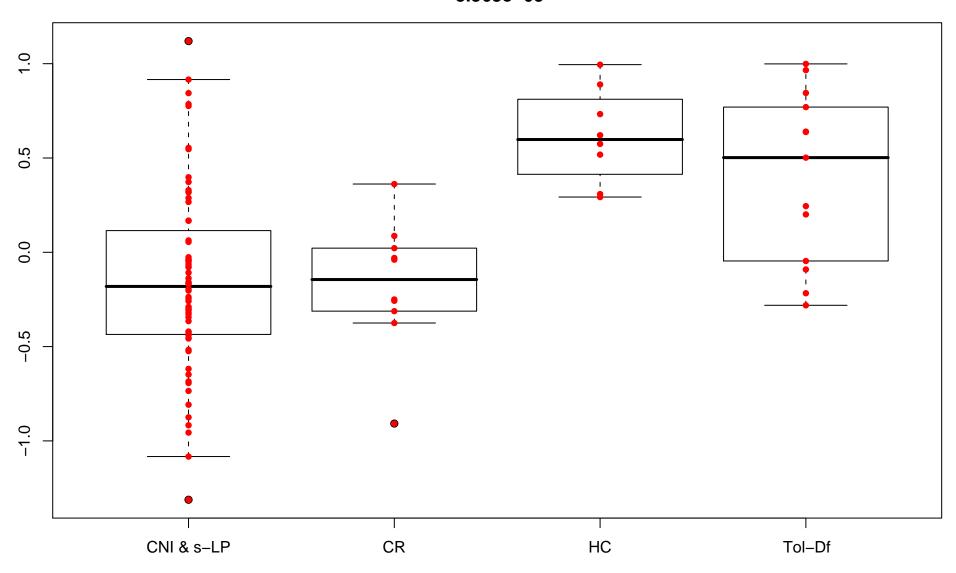
Rank 52: IFNAR1 3.1601e-05



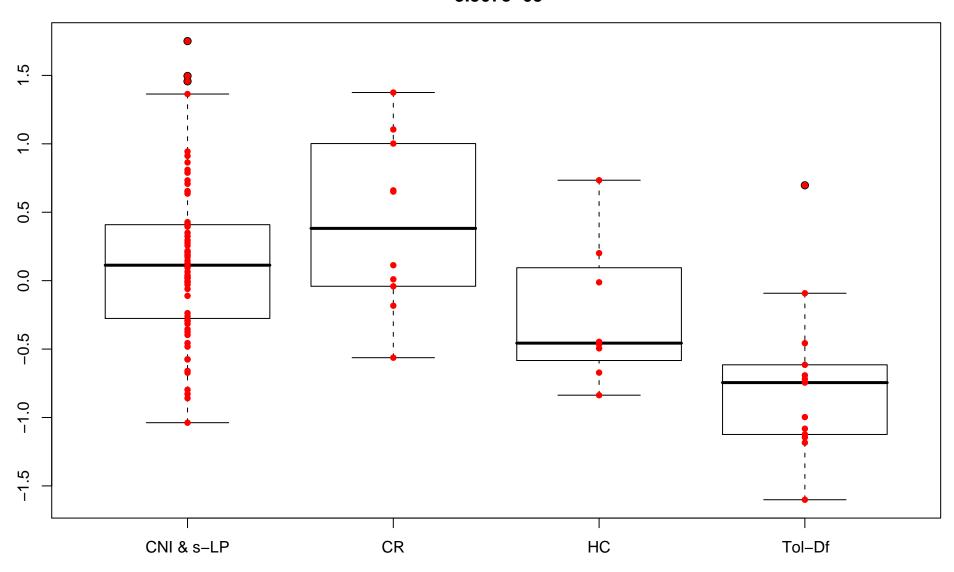
Rank 53: MAGEA10 3.2e-05



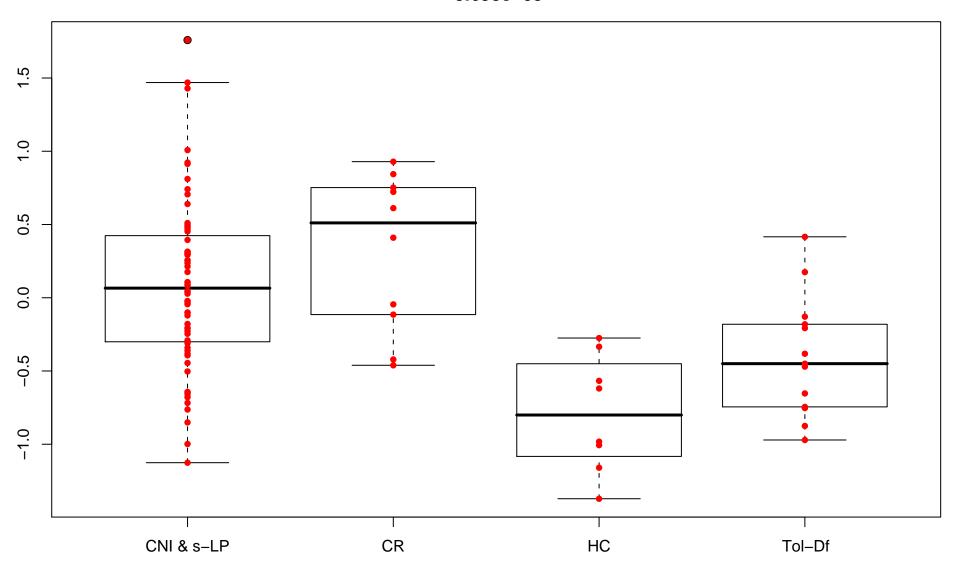
Rank 54: HLA-DOB 3.363e-05



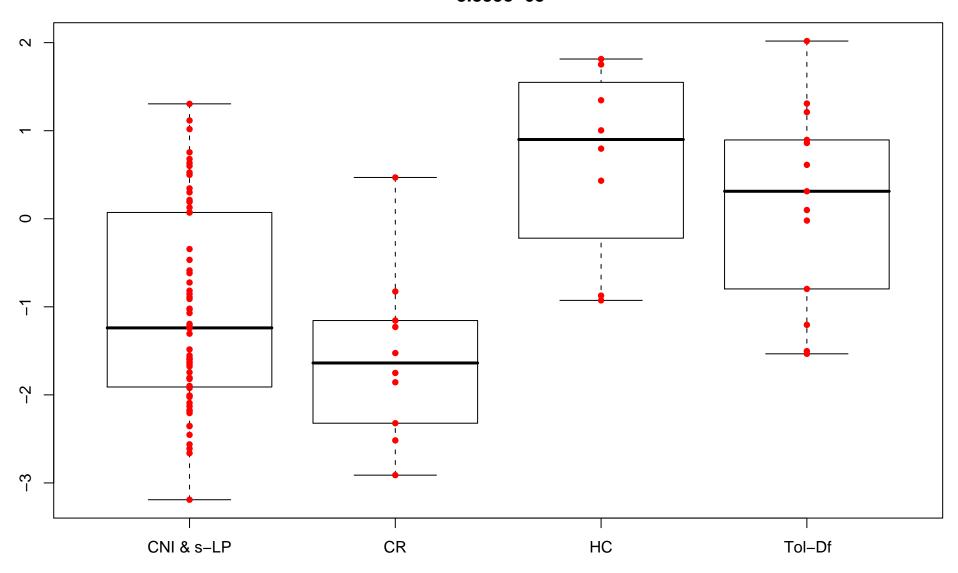
Rank 55 : CD163 3.507e-05



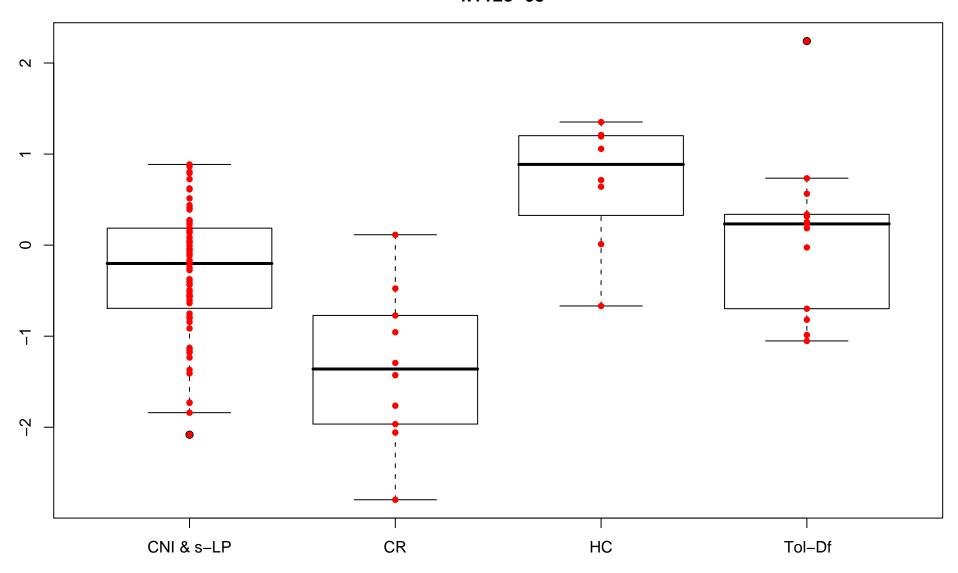
Rank 56 : FLJ32866 3.698e-05



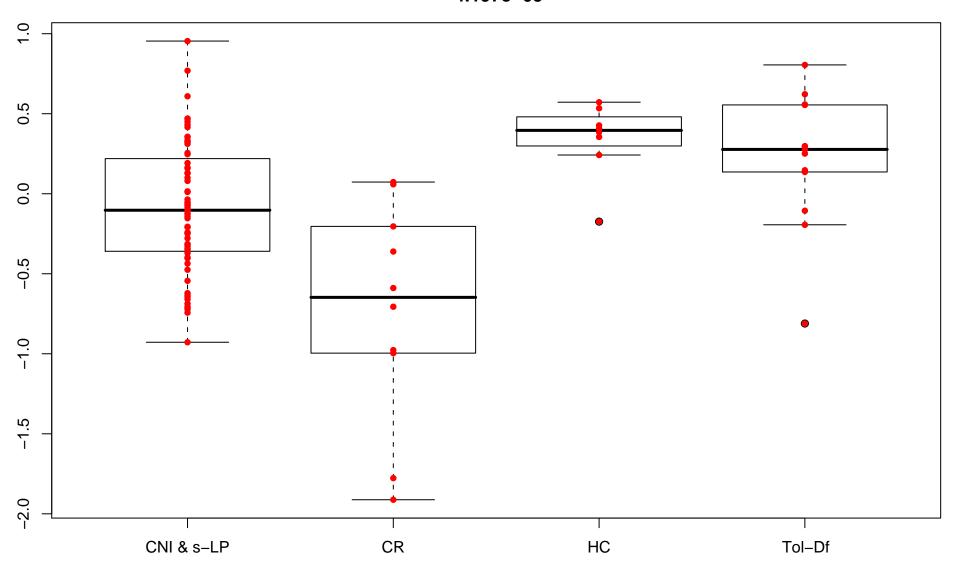
Rank 57 : EBF1 3.855e-05



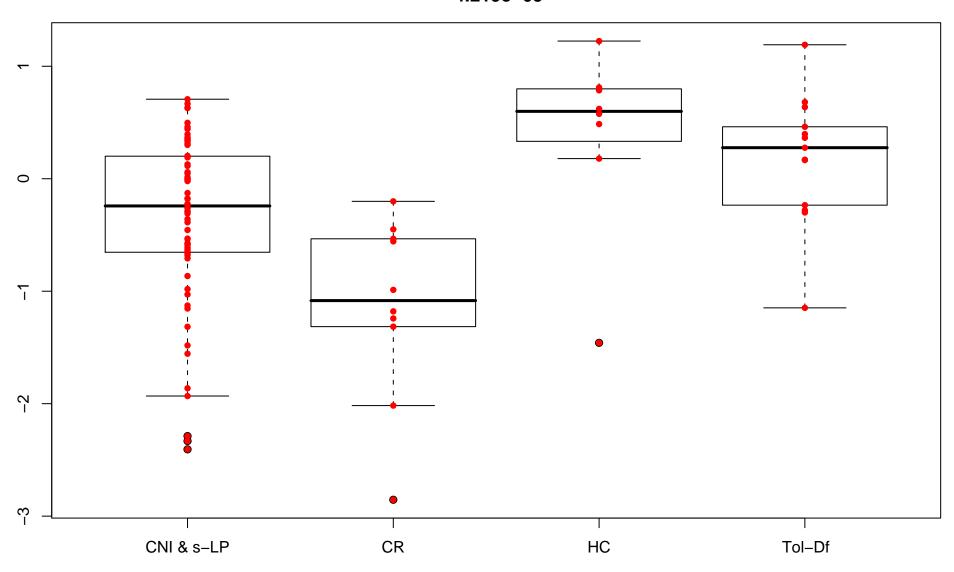
Rank 58 : GPR92 4.112e-05



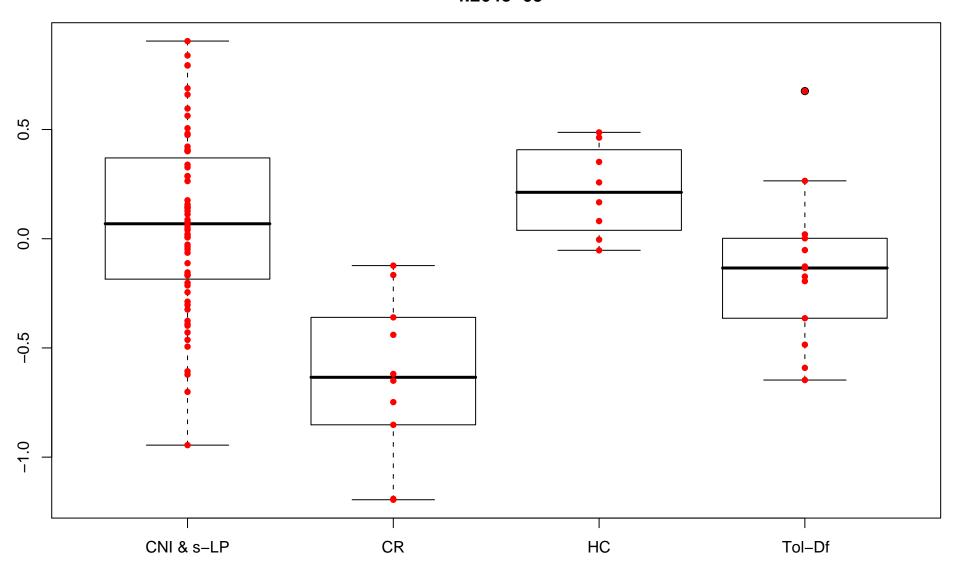
Rank 59 : COX11 4.197e-05



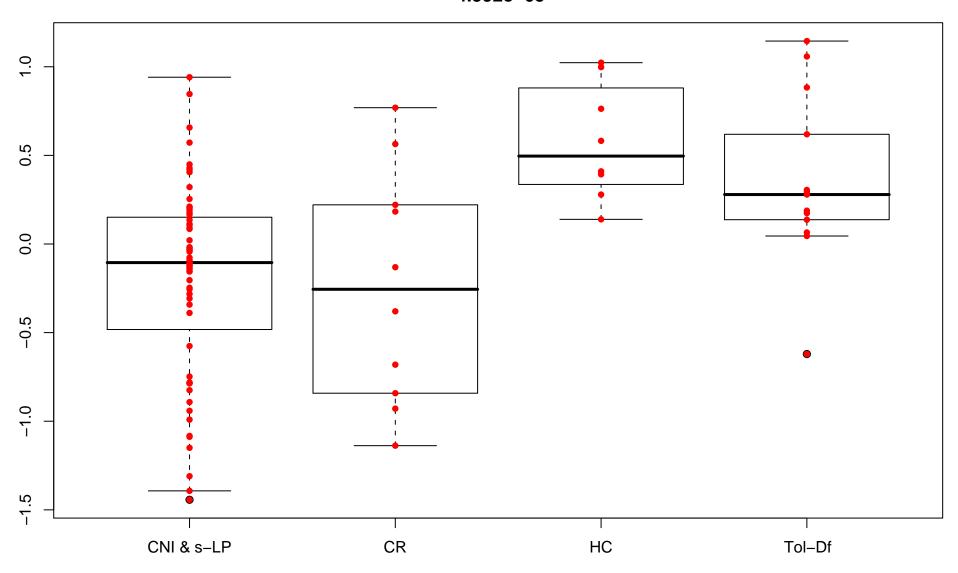
Rank 60 : PEX3 4.219e-05



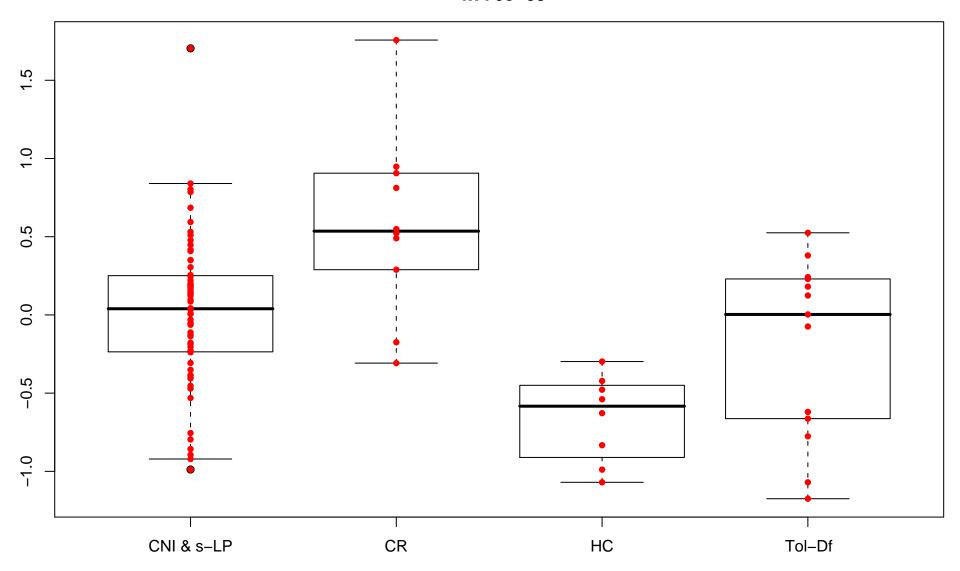
Rank 61 : ACVR1 4.264e-05



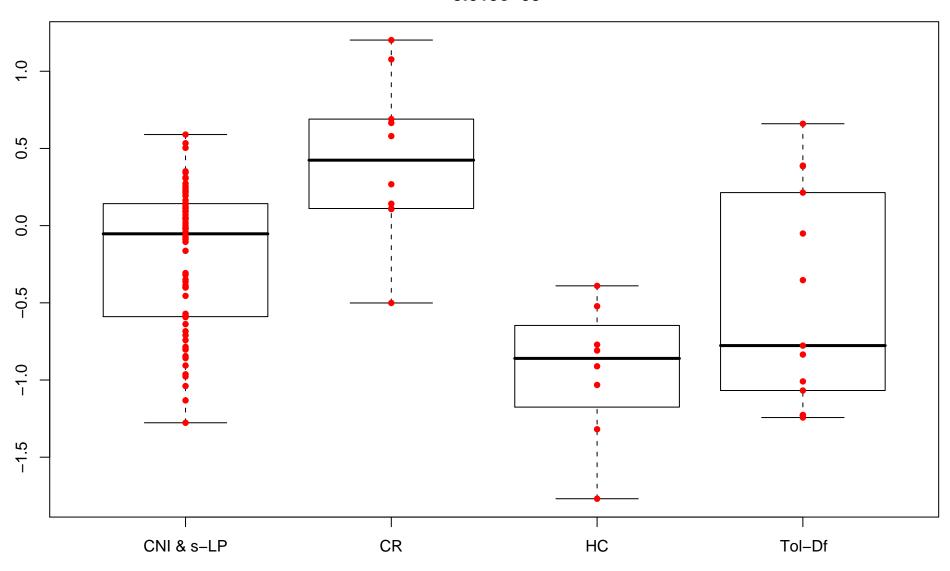
Rank 62 : CD83 4.592e-05



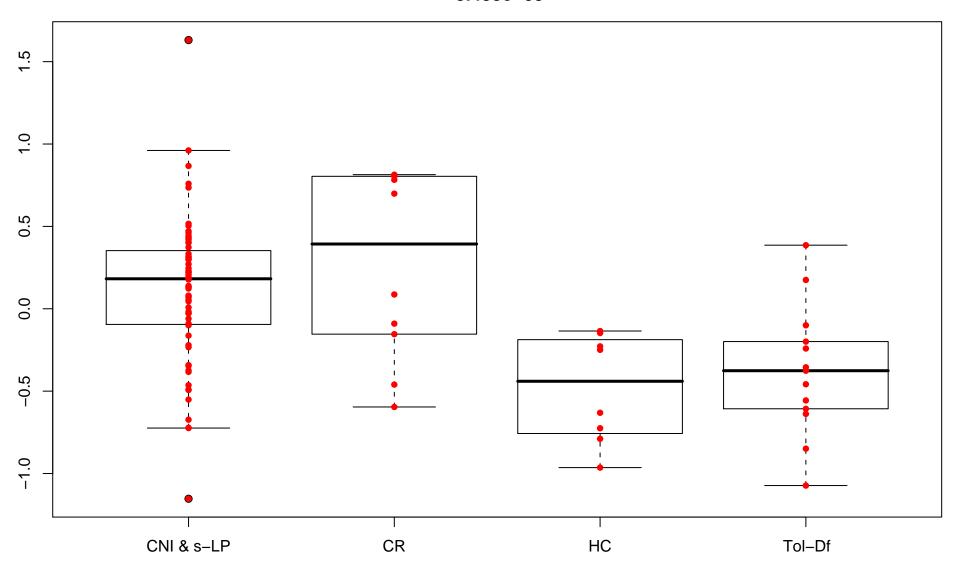
Rank 63 : GPR120 4.776e-05



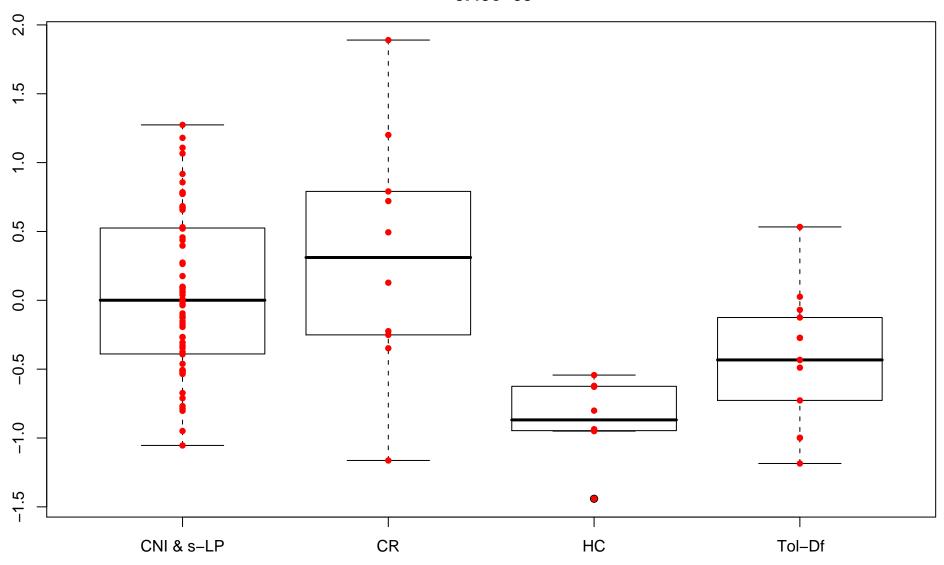
Rank 64 : FLJ23356 5.019e-05



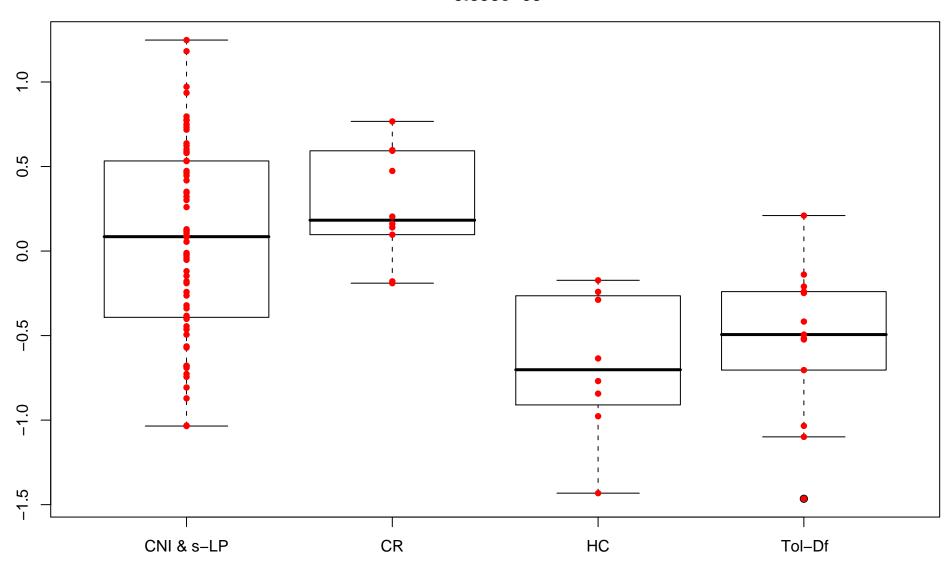
Rank 65 : FAM129A 5.453e-05



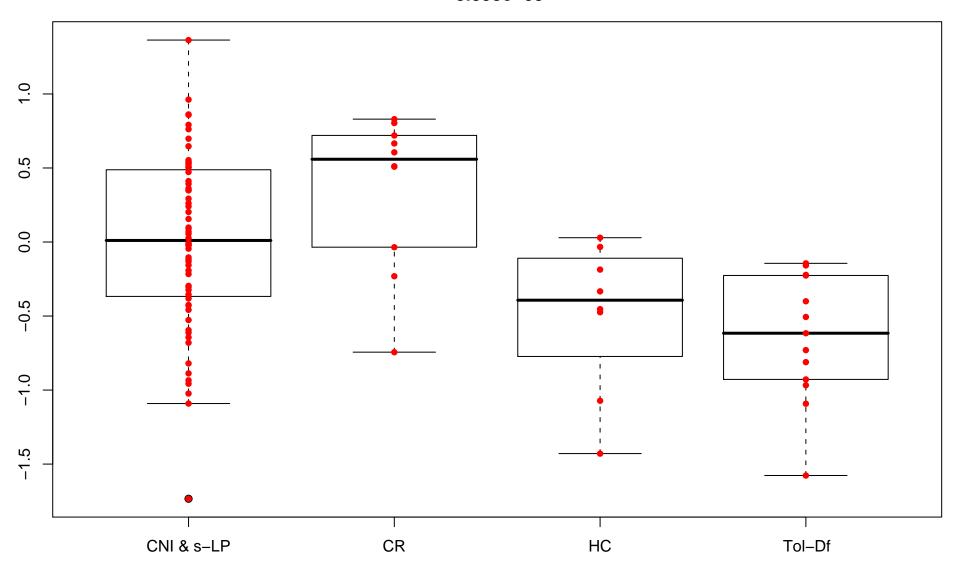
Rank 66 : ASPH 5.49e-05



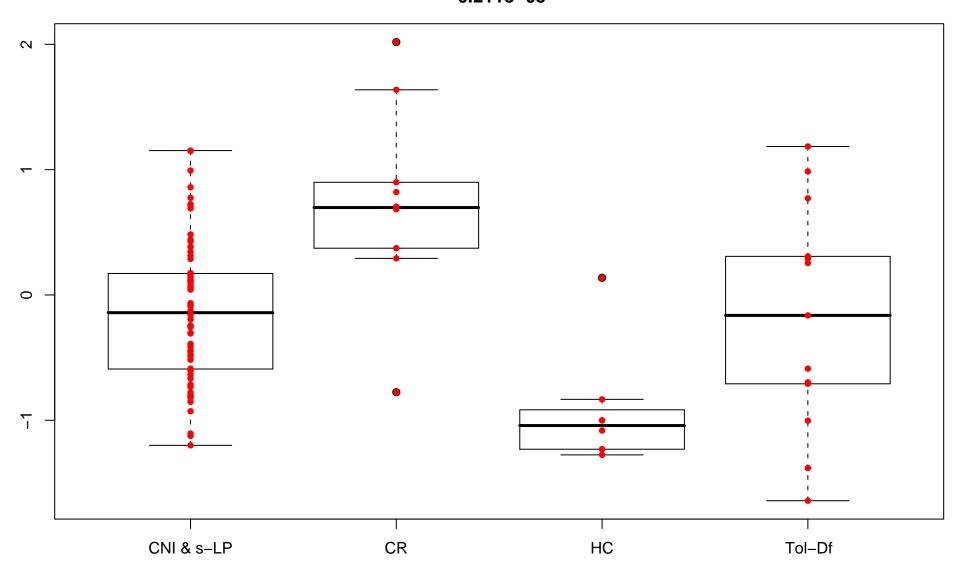
Rank 67 : MCTP1 5.858e-05



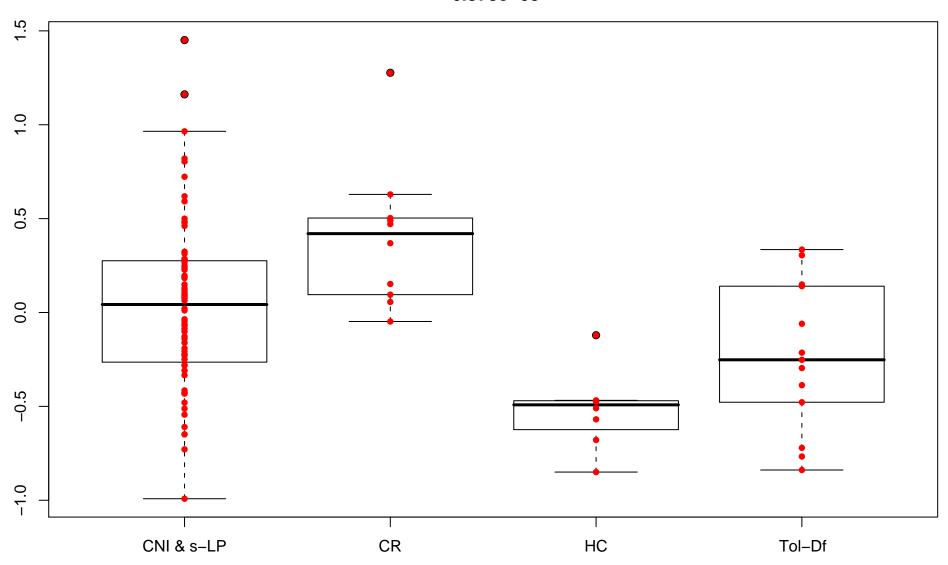
Rank 68 : SORT1 5.895e-05



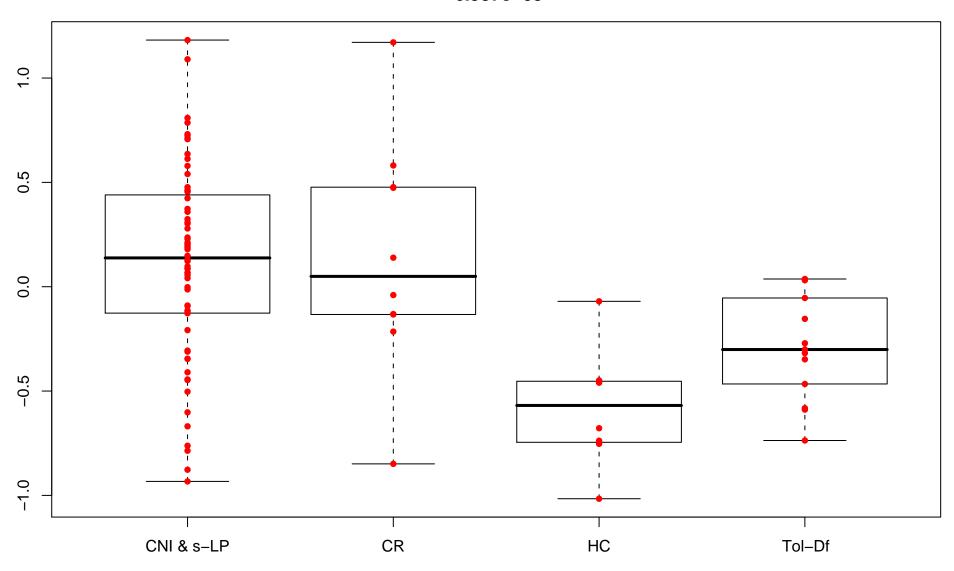
Rank 69: F8 6.211e-05



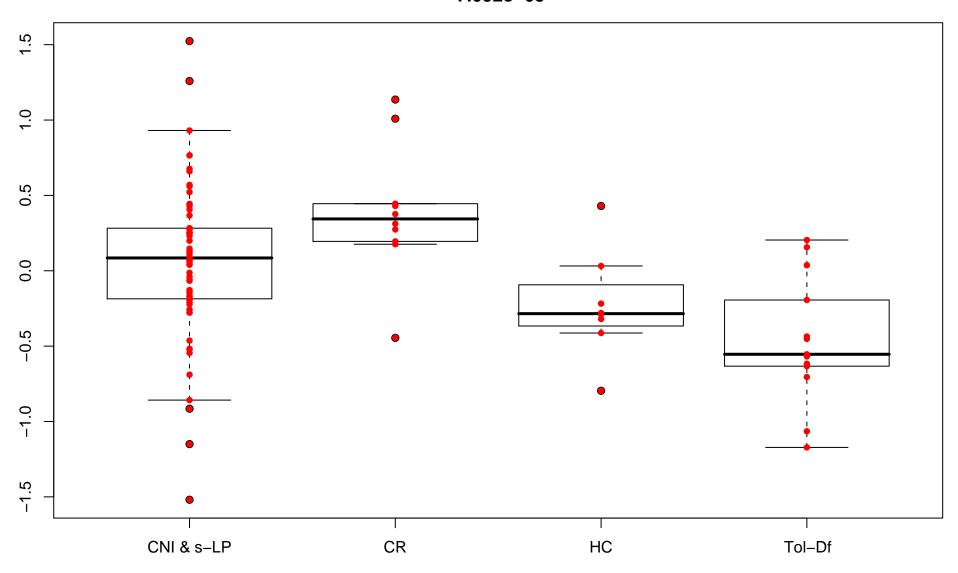
Rank 70: TMEM49 6.878e-05



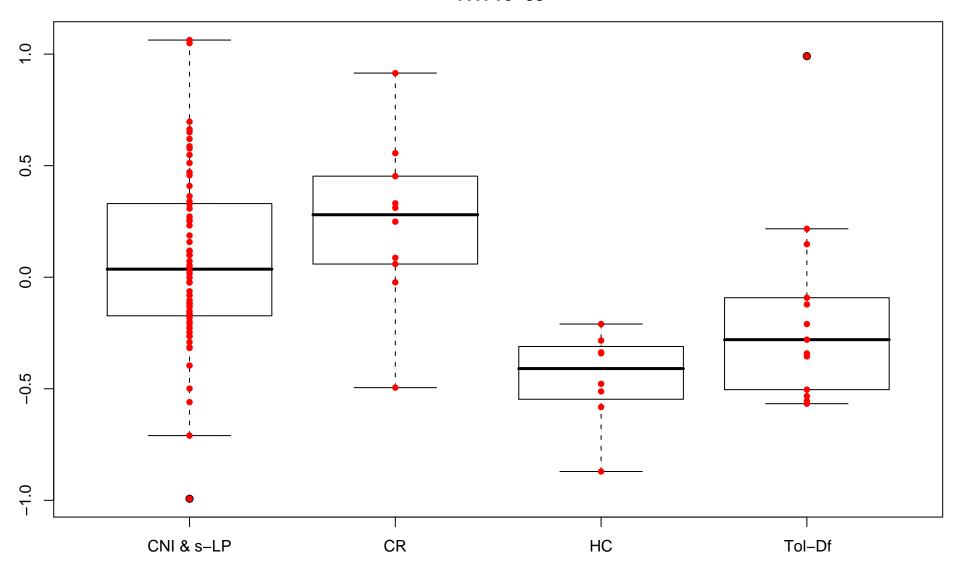
Rank 71: MBOAT2 6.937e-05



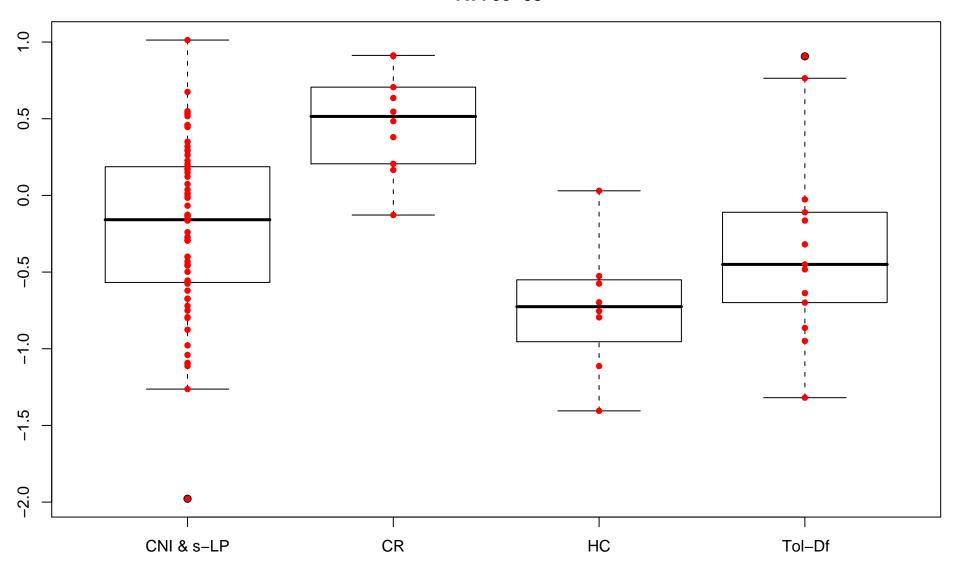
Rank 72 : SORL1 7.092e-05



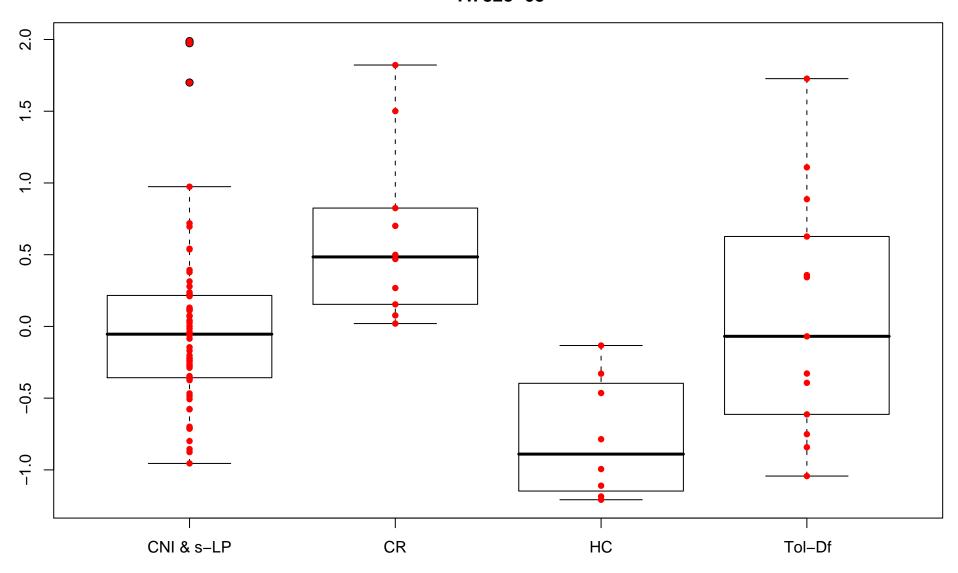
Rank 73 : IQGAP1 7.171e-05



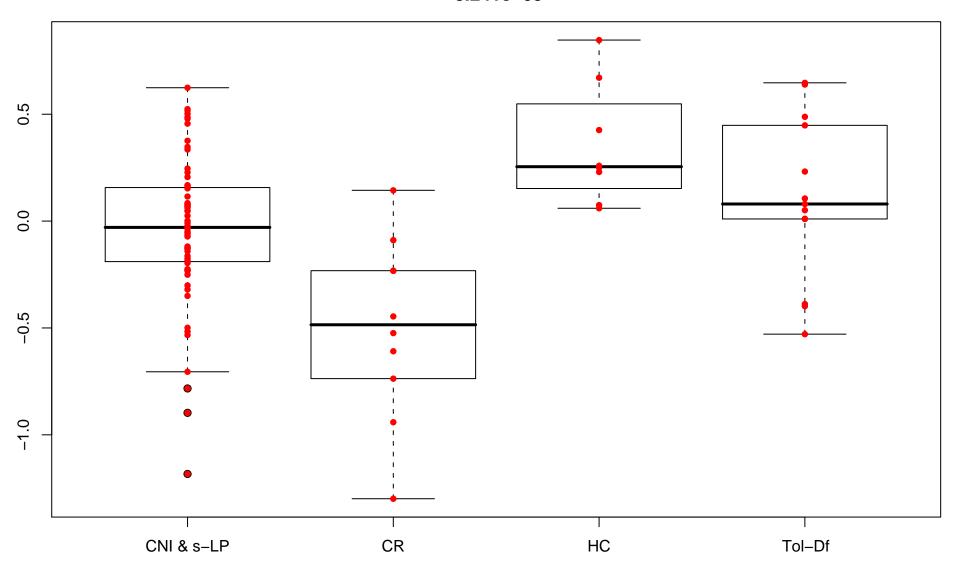
Rank 74 : CLEC6A 7.776e-05



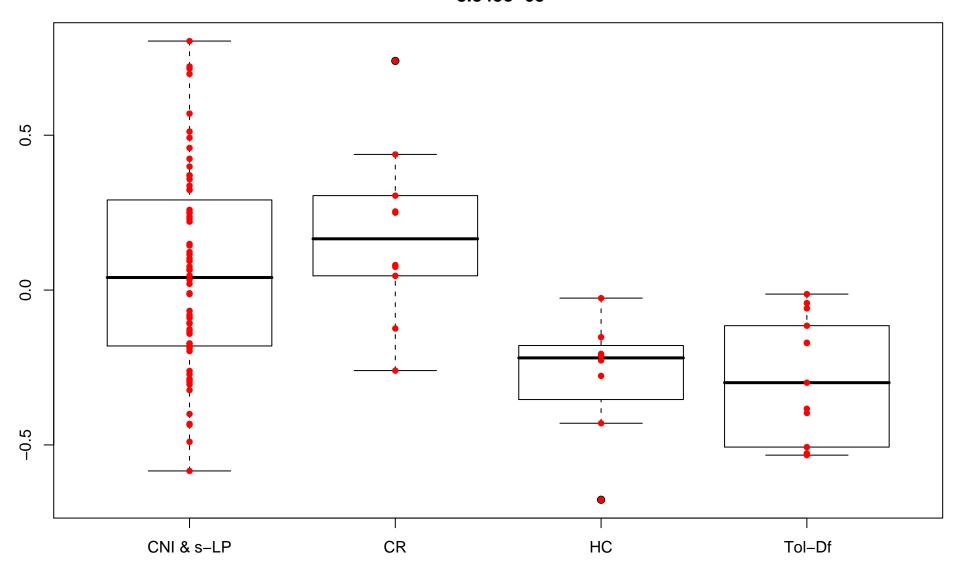
Rank 75 : SIRPA 7.782e-05



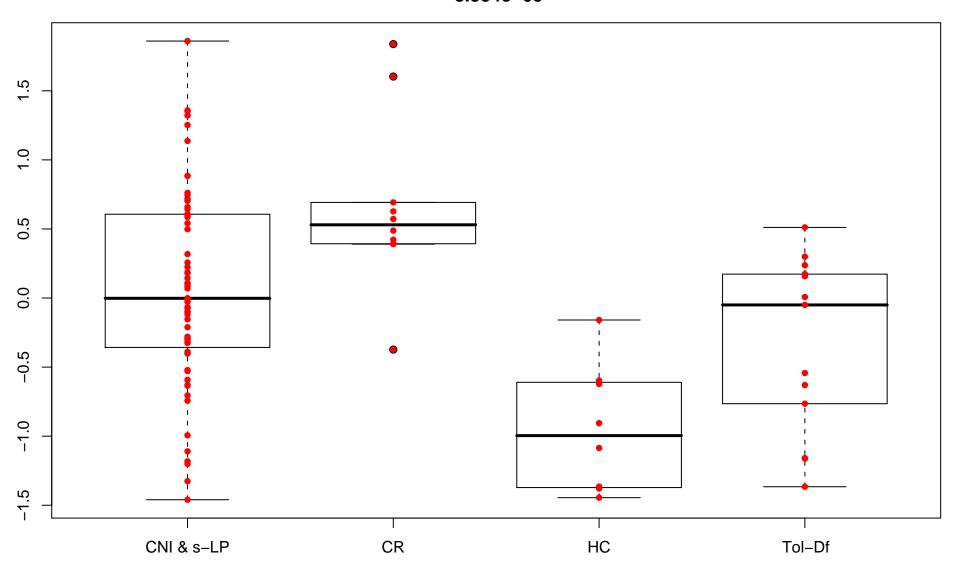
Rank 76: PDHX 8.241e-05



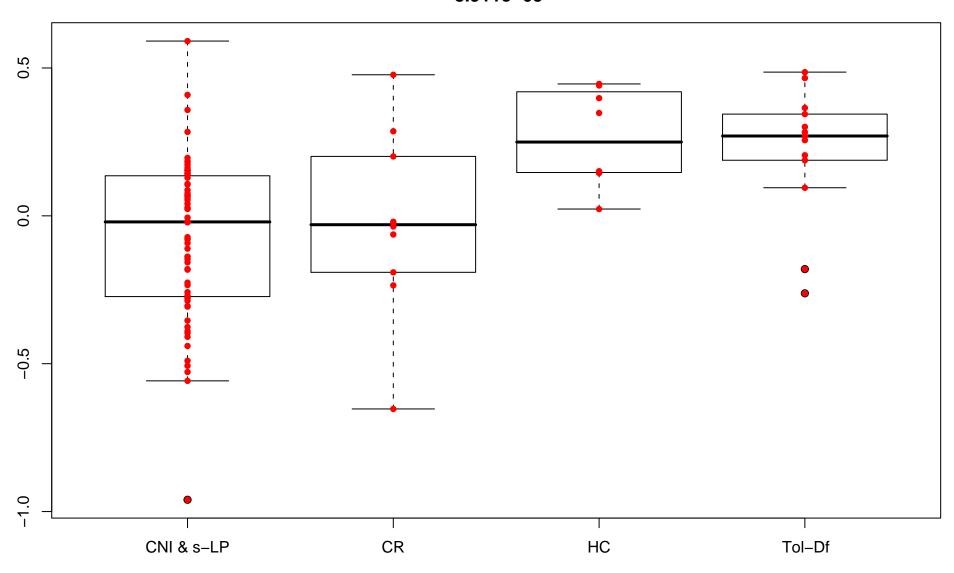
Rank 77: STAT3 8.345e-05



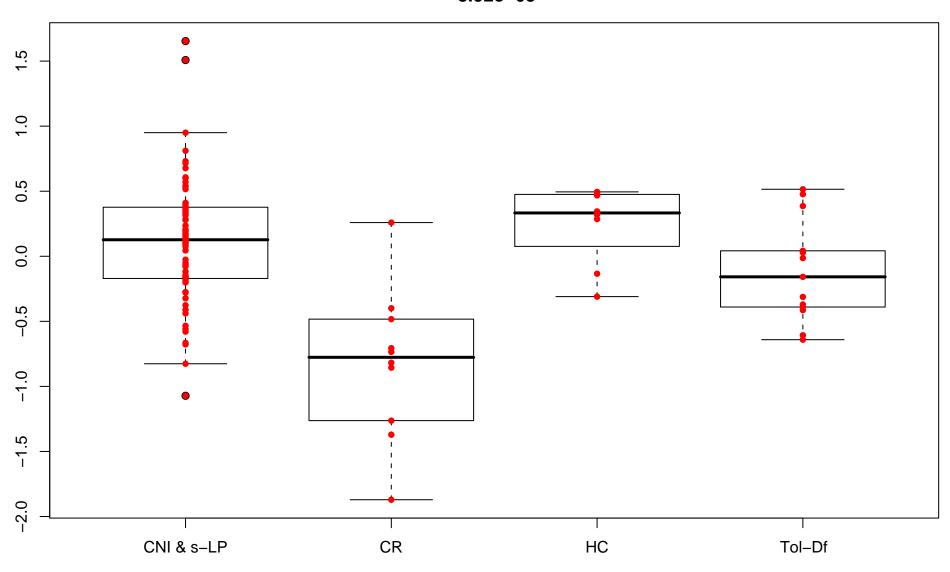
Rank 78 : SLPI 8.534e-05



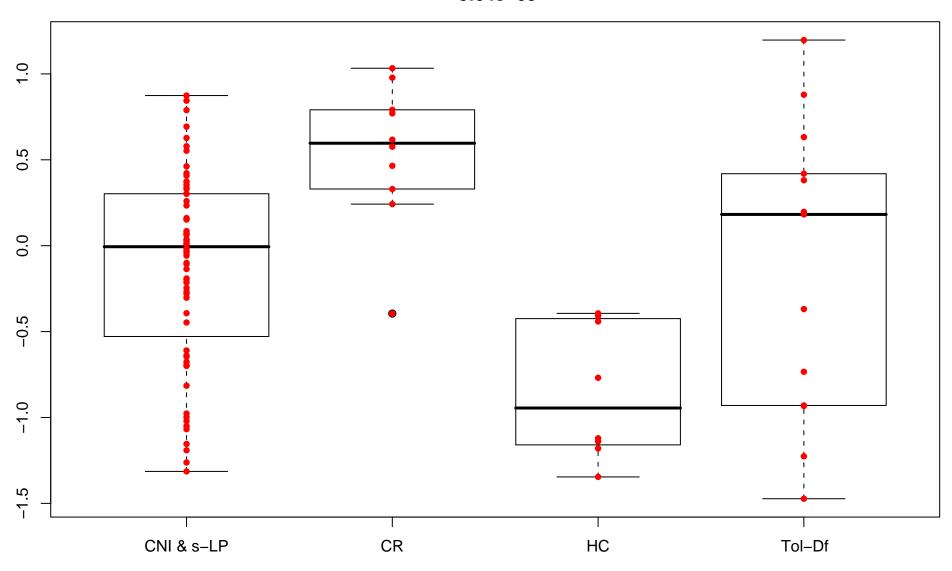
Rank 79: NTHL1 8.911e-05



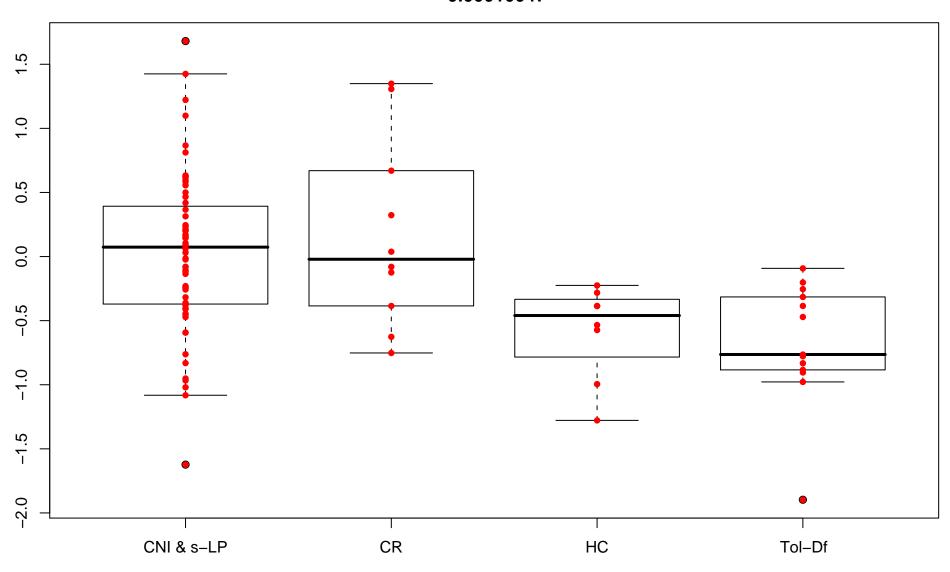
Rank 80 : CXCL5 8.92e-05



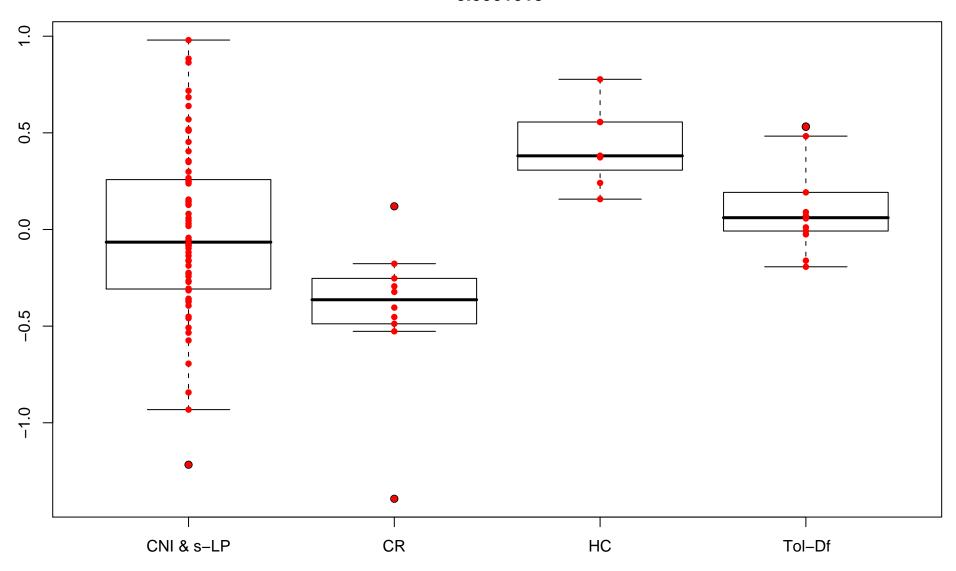
Rank 81 : RET 9.64e-05



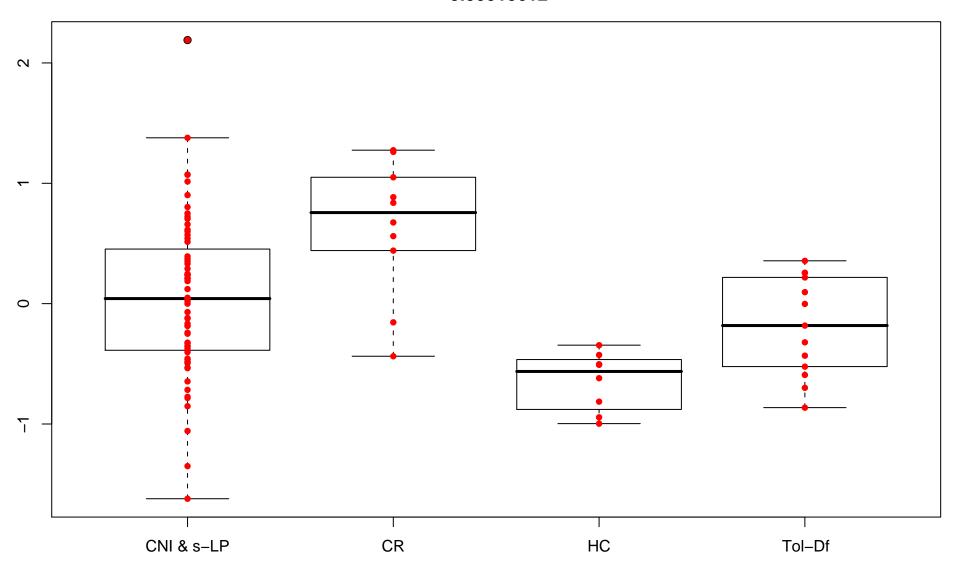
Rank 82 : GPR84 0.00010047



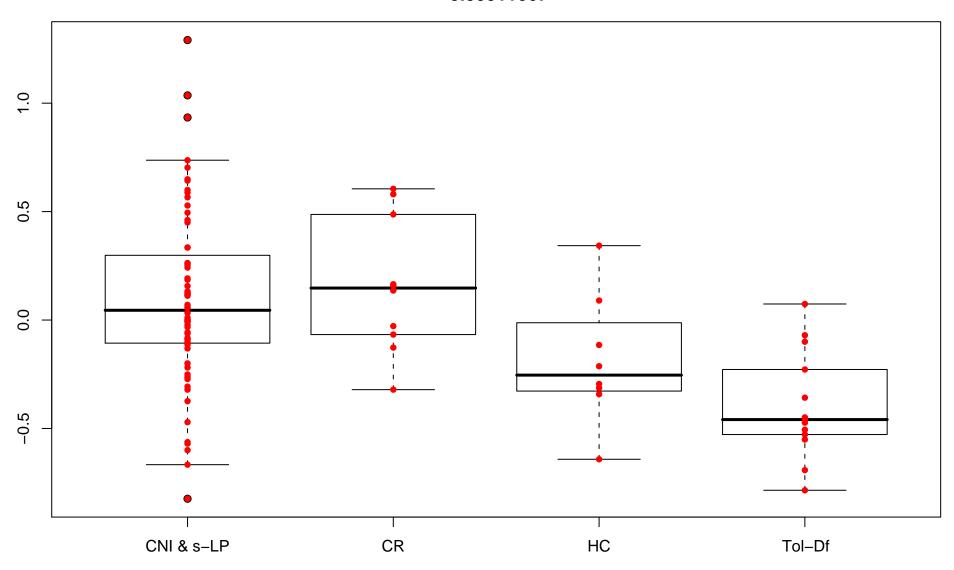
Rank 83 : ITK 0.0001015



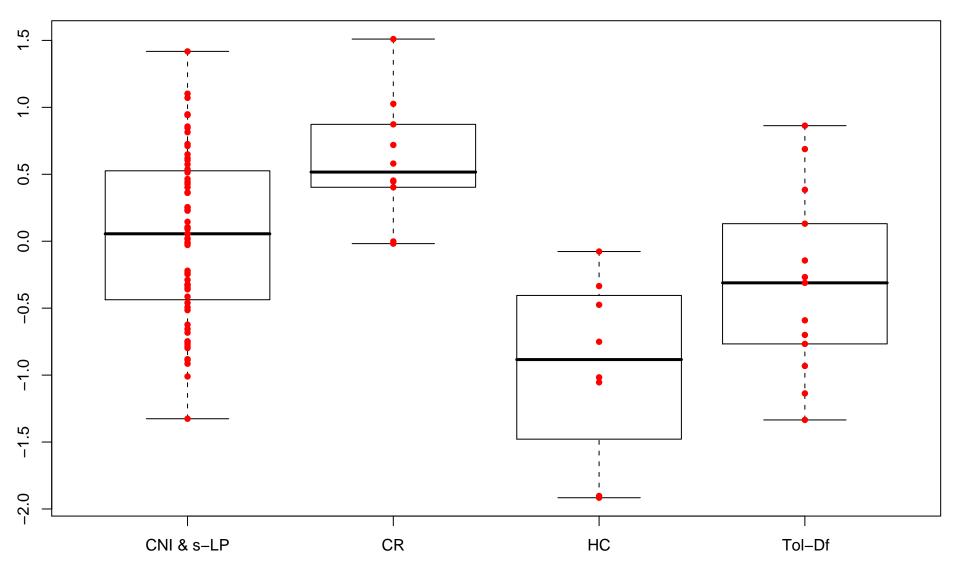
Rank 84 : AIM2 0.00010612



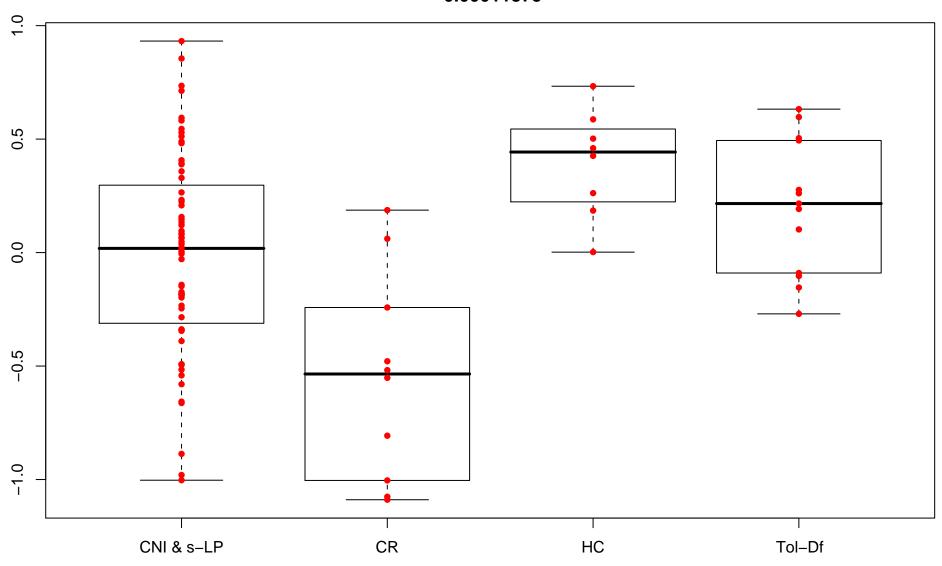
Rank 85 : NCOA1 0.00011667



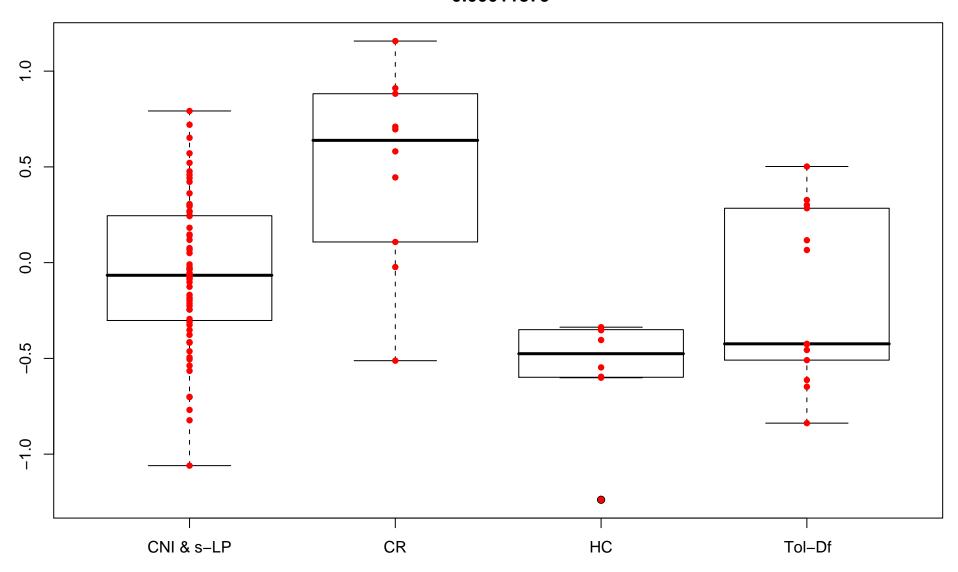
Rank 86 : LOC145474 0.00011707



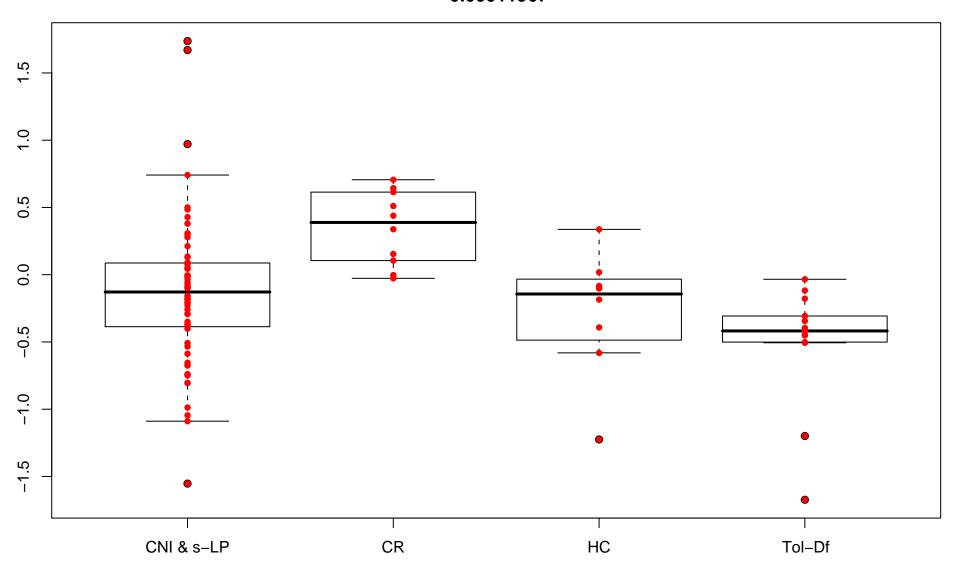
Rank 87 : TNFAIP8 0.00011875



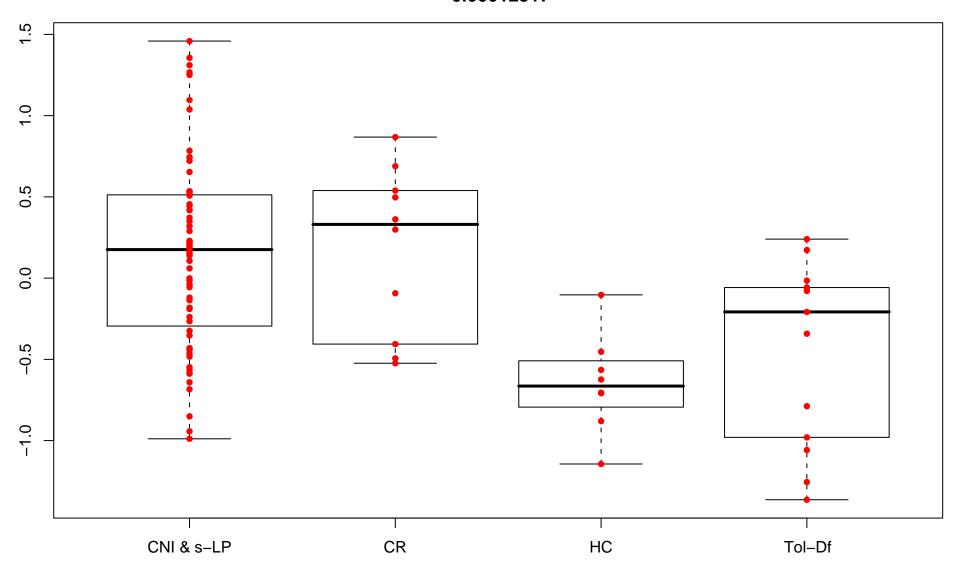
Rank 88 : ENOX2 0.00011879



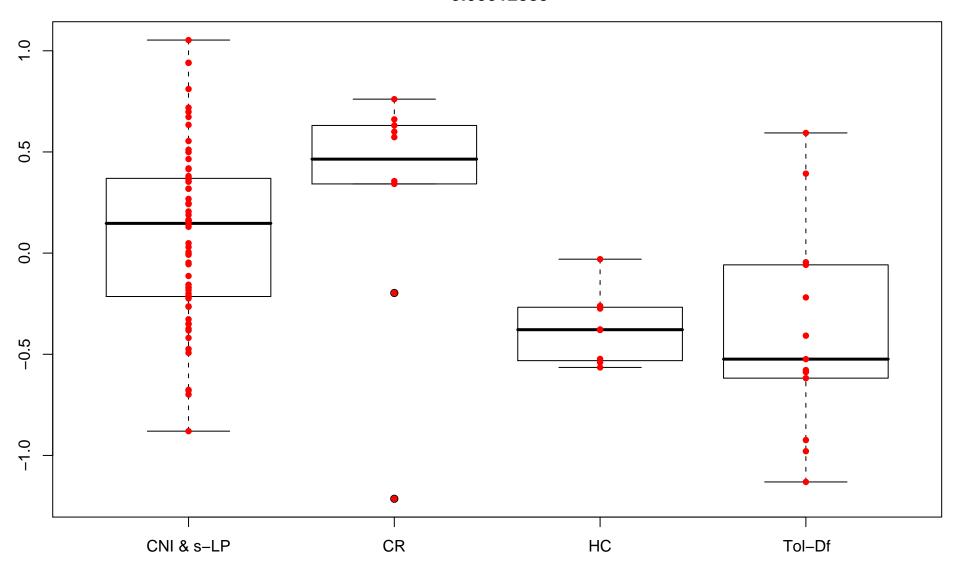
Rank 89 : FSTL3 0.00011967



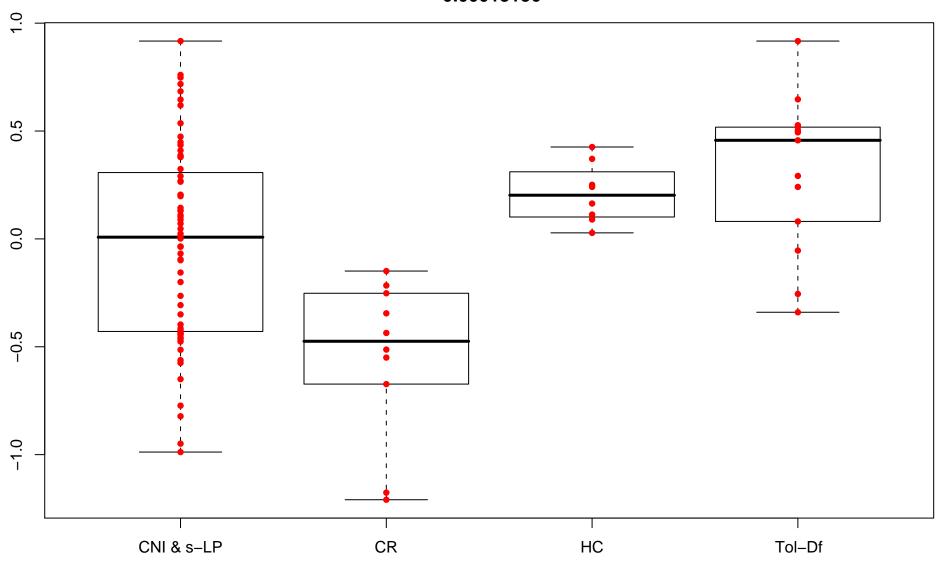
Rank 90 : FAM13A1 0.00012517



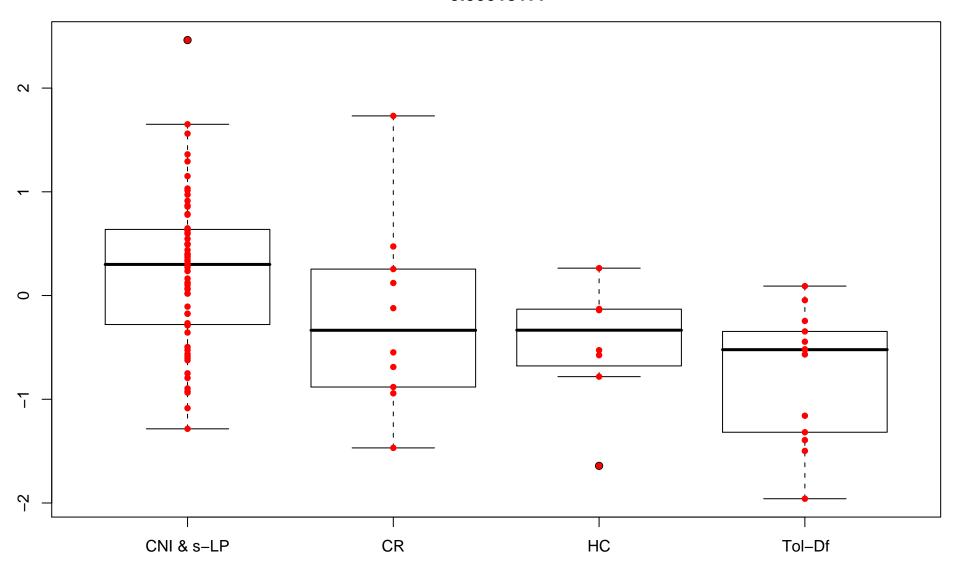
Rank 91 : KCNJ2 0.00012889



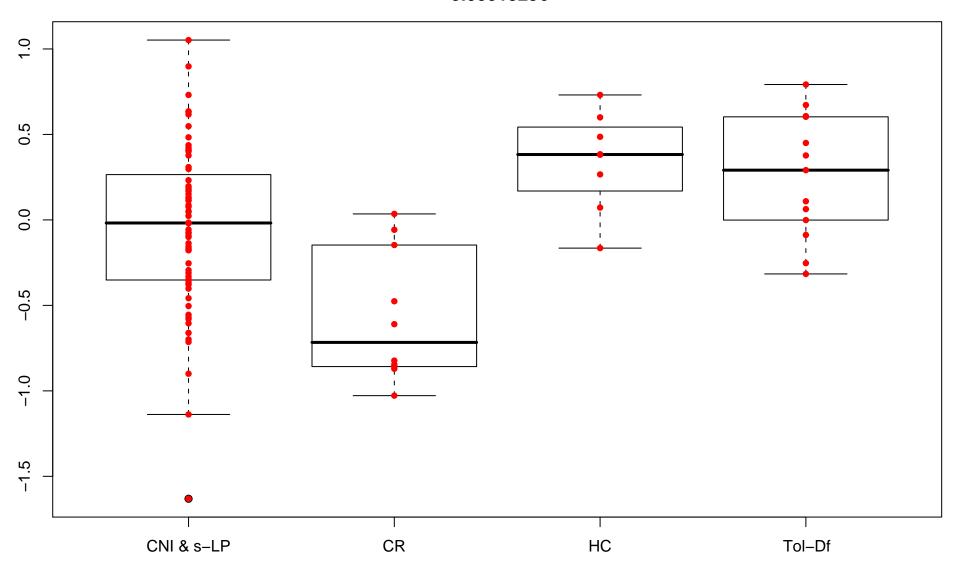
Rank 92 : BNIP3 0.00013136



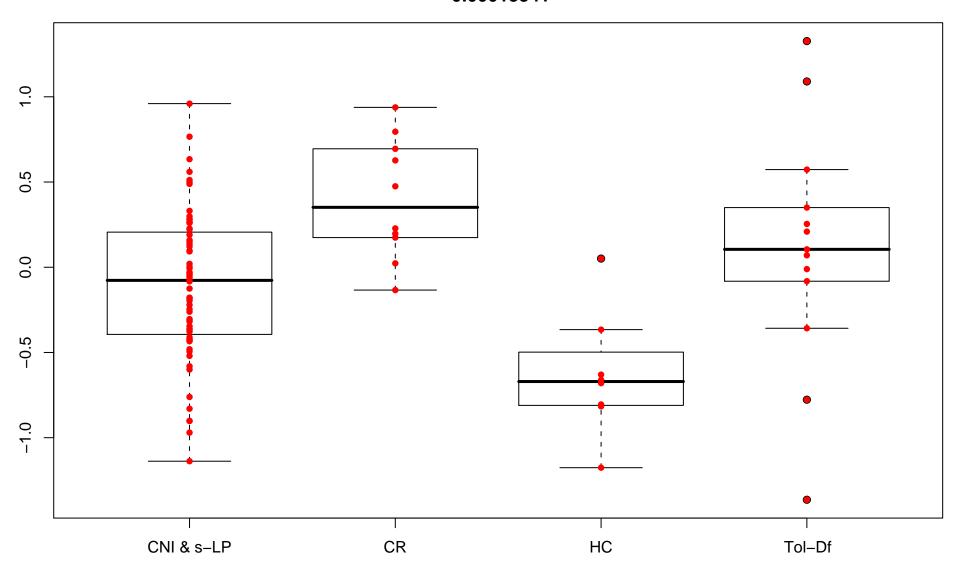
Rank 93 : GALNT14 0.00013177



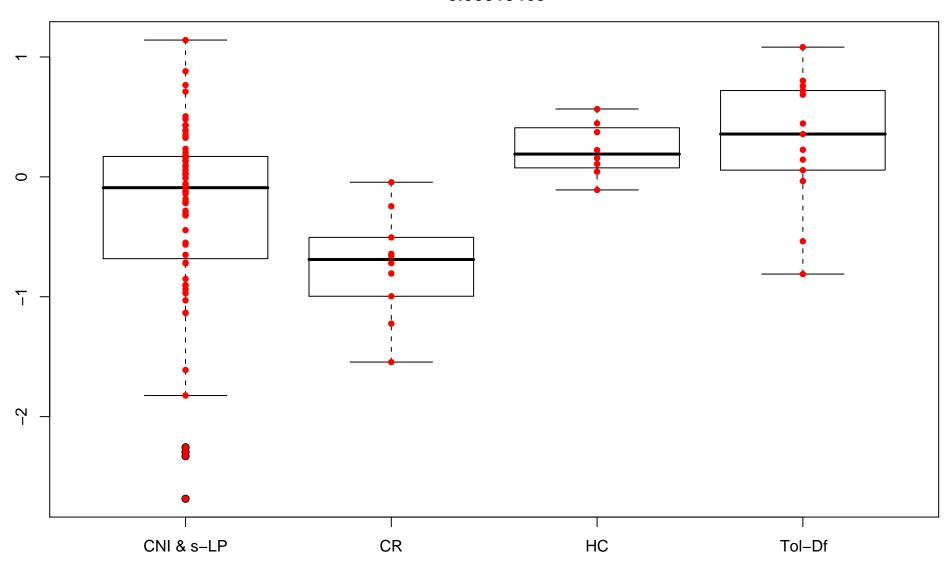
Rank 94 : TGDS 0.00013296



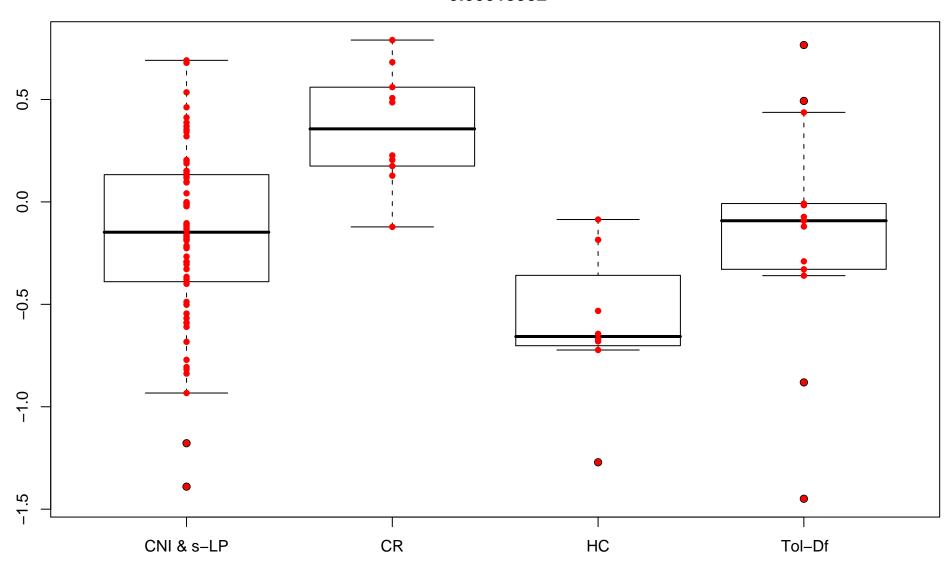
Rank 95 : VSIG2 0.00013341



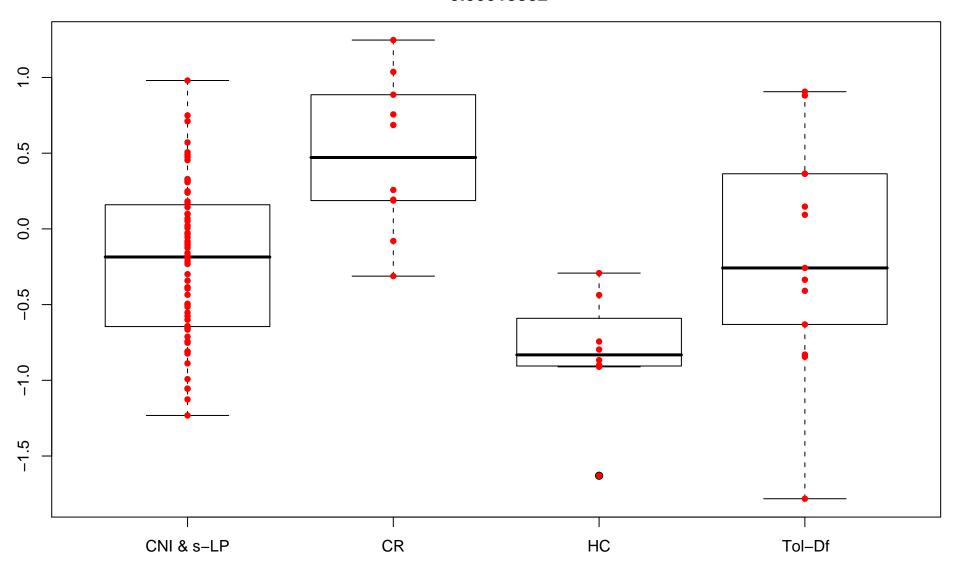
Rank 96 : DNAJC19 0.00013469



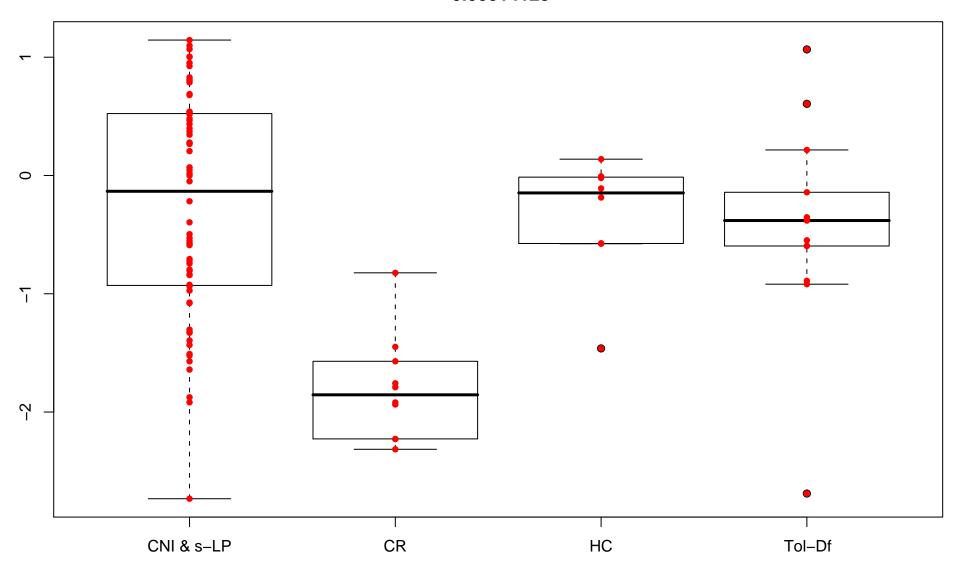
Rank 97 : A\_23\_P126328 0.00013582



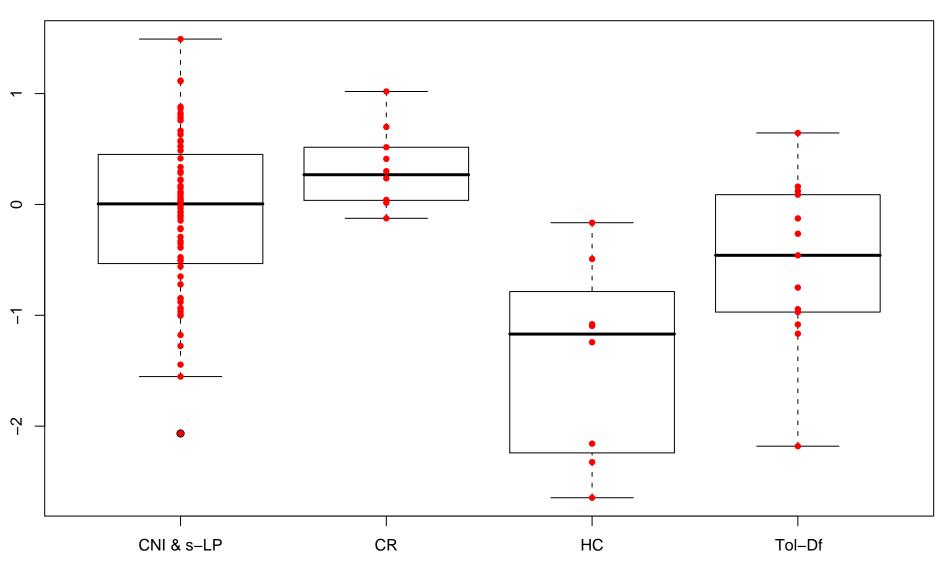
Rank 98: PPL 0.00013882



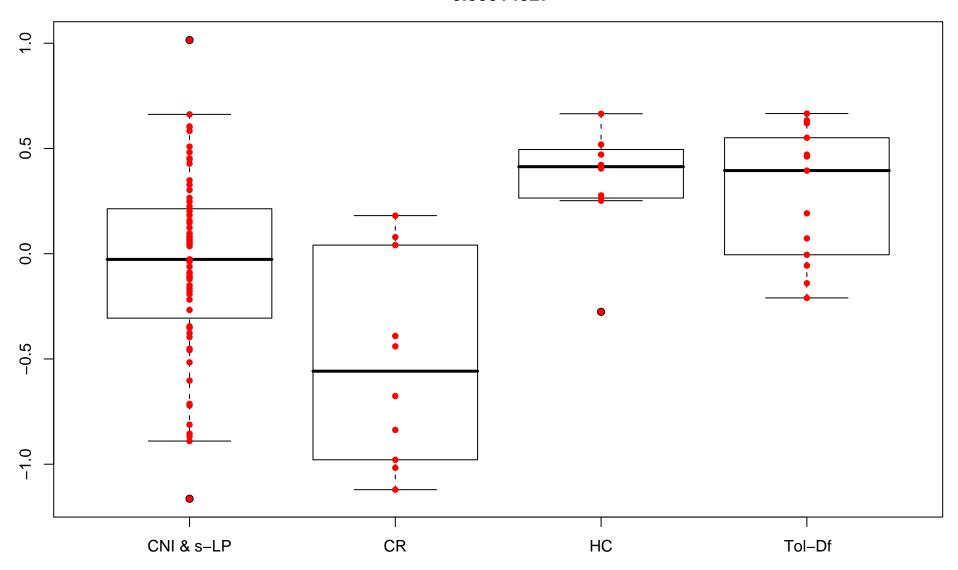
Rank 99: WASF3 0.00014123



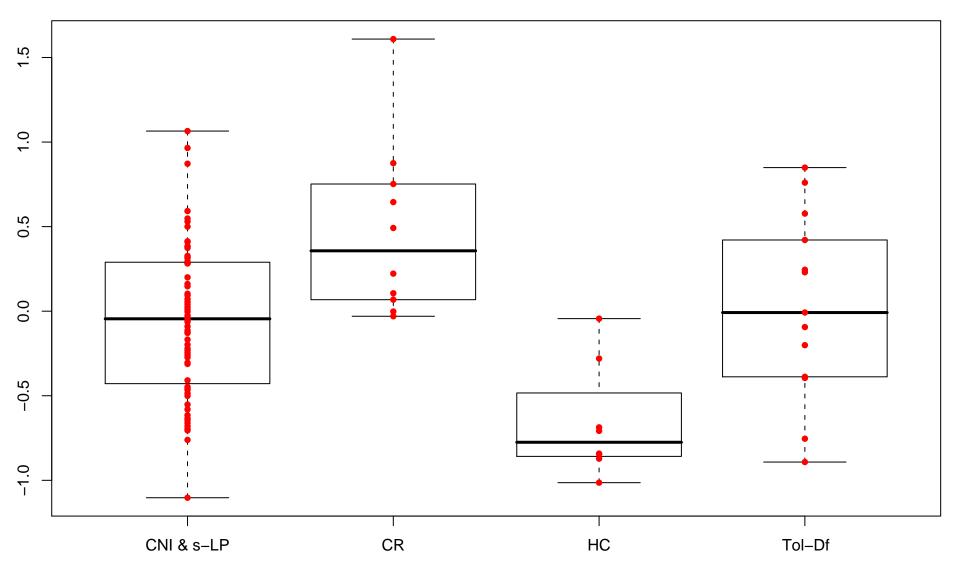
Rank 100 : THC2380706 0.00014497



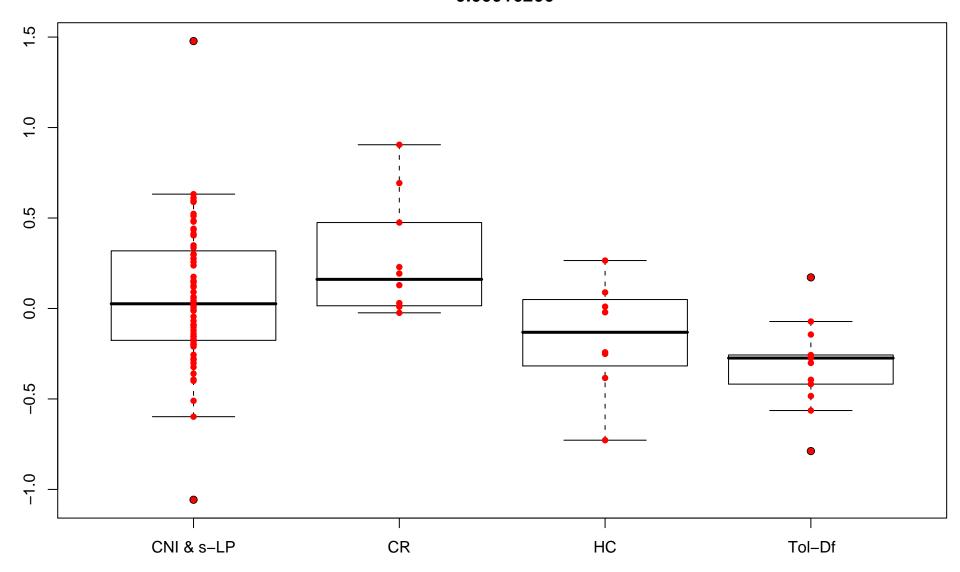
Rank 101 : C1ORF19 0.00014827



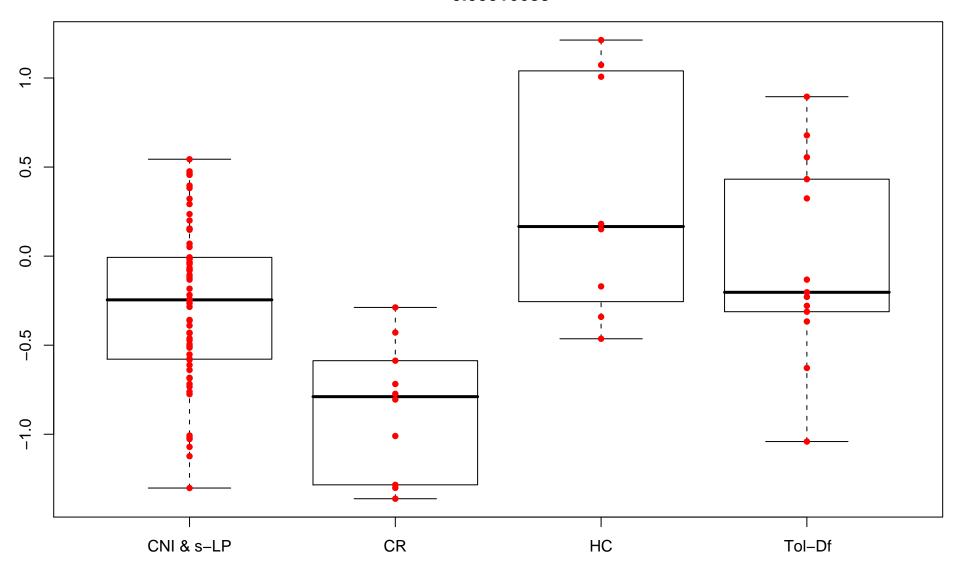
Rank 102 : SERPINH1 0.00015675



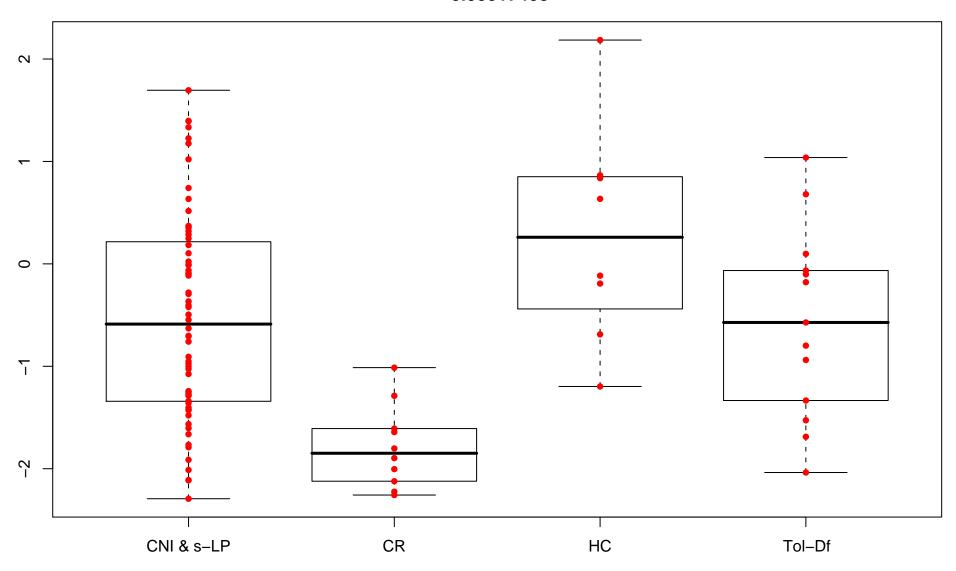
Rank 103 : LITAF 0.00016266



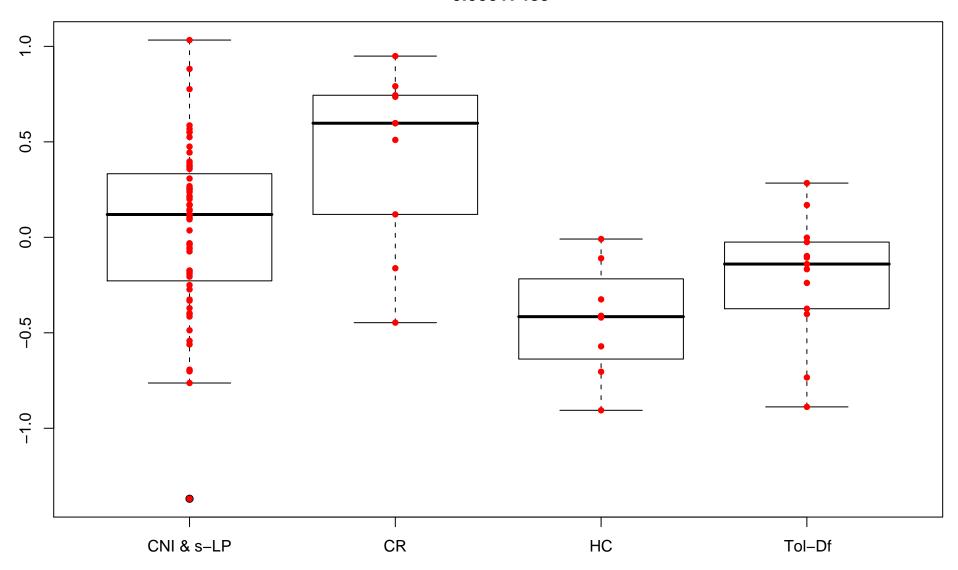
Rank 104 : FLJ37035 0.00016688



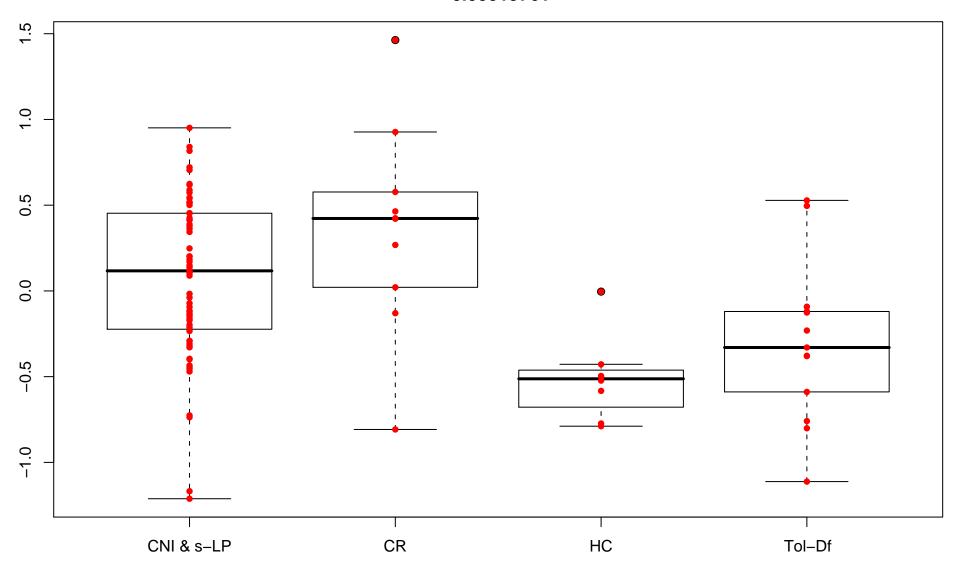
Rank 105 : FGF7 0.00017408



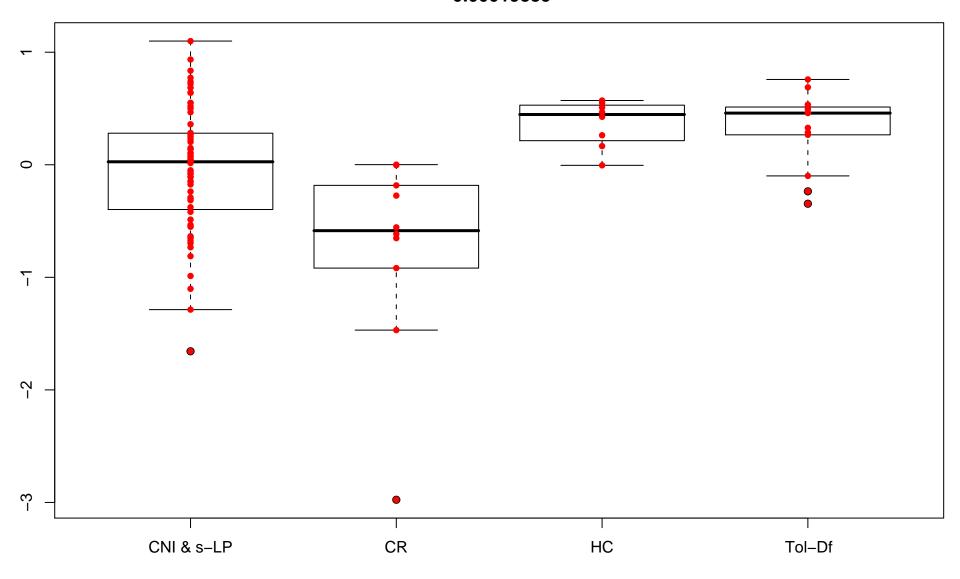
Rank 106 : SLC25A37 0.00017489



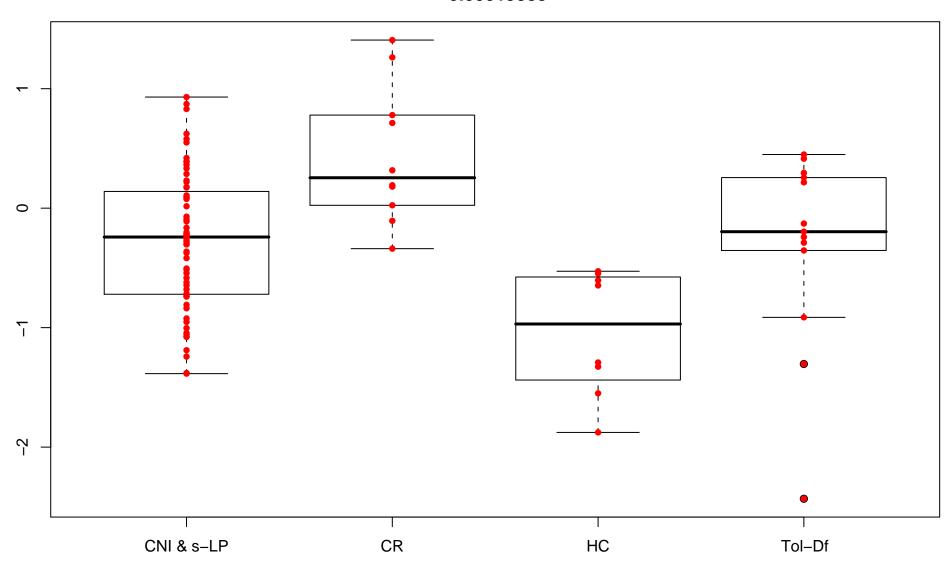
Rank 107 : IGF1R 0.00019761



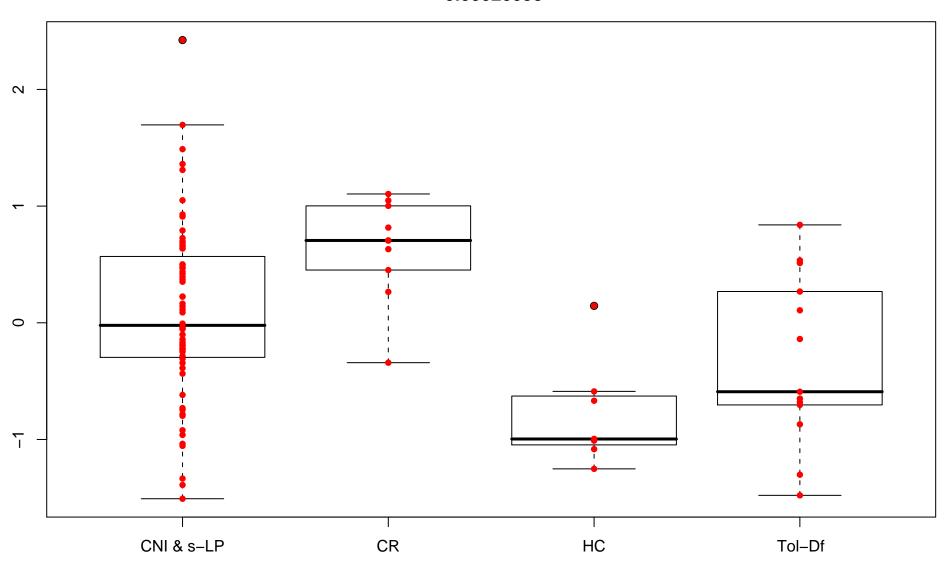
Rank 108 : EDG1 0.00019885



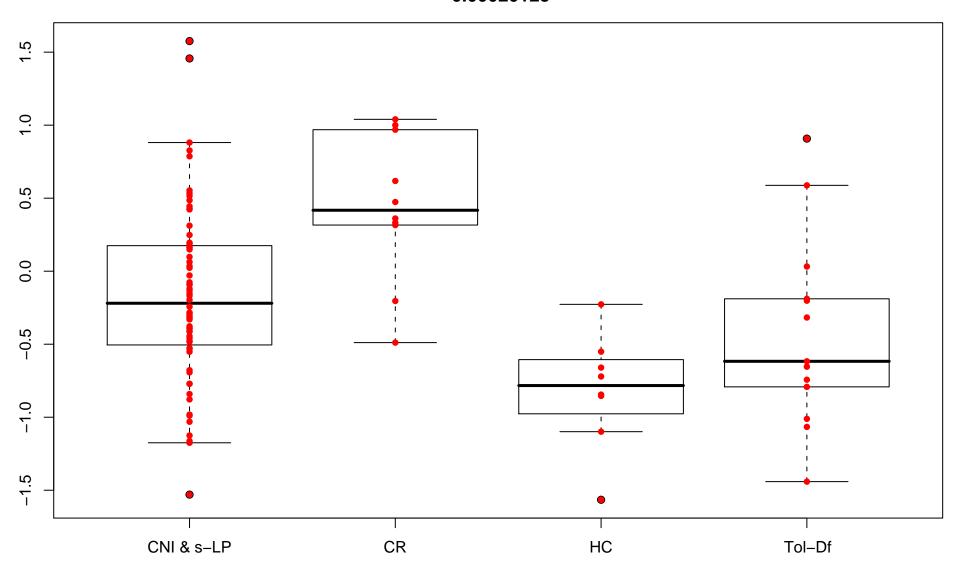
Rank 109 : NGEF 0.00019888



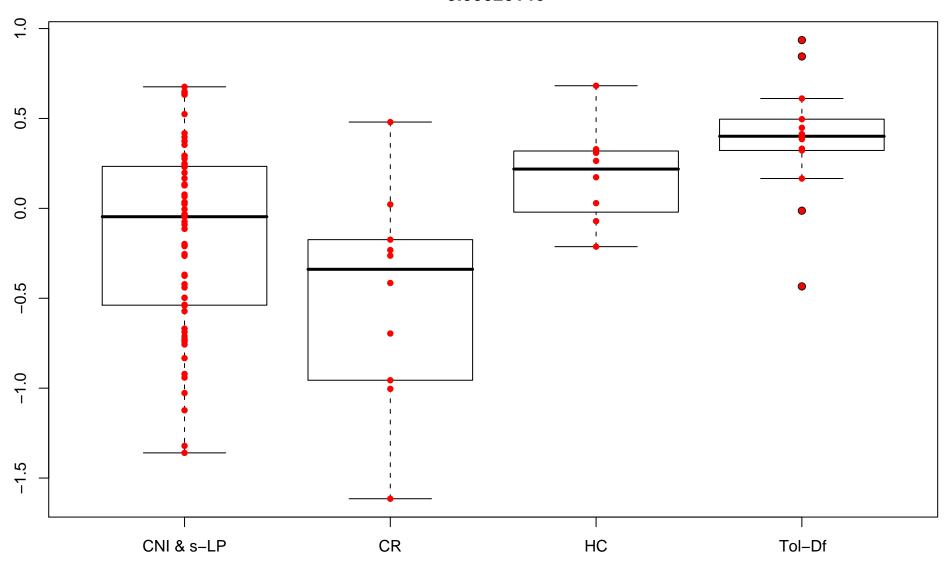
Rank 110 : TNFAIP6 0.00020038



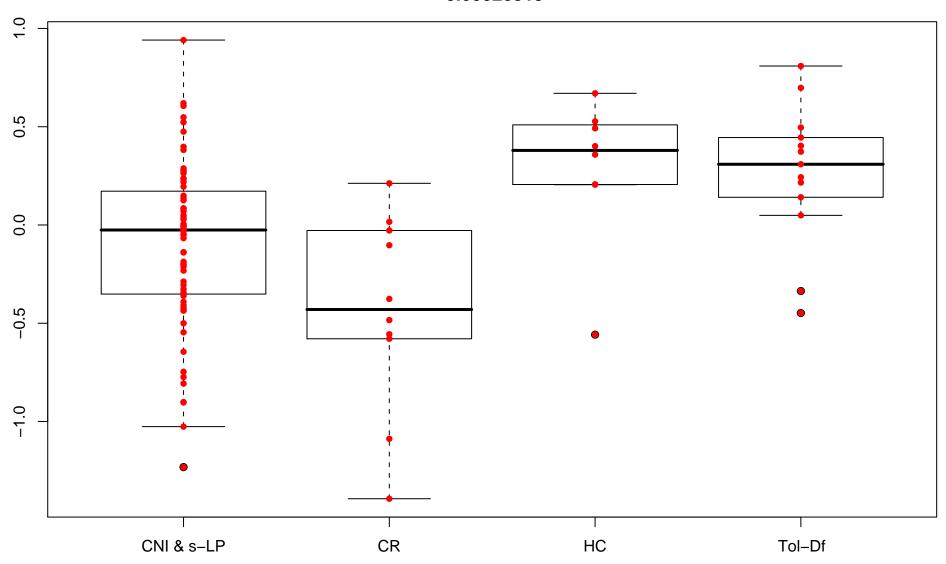
Rank 111 : RAX 0.00020123



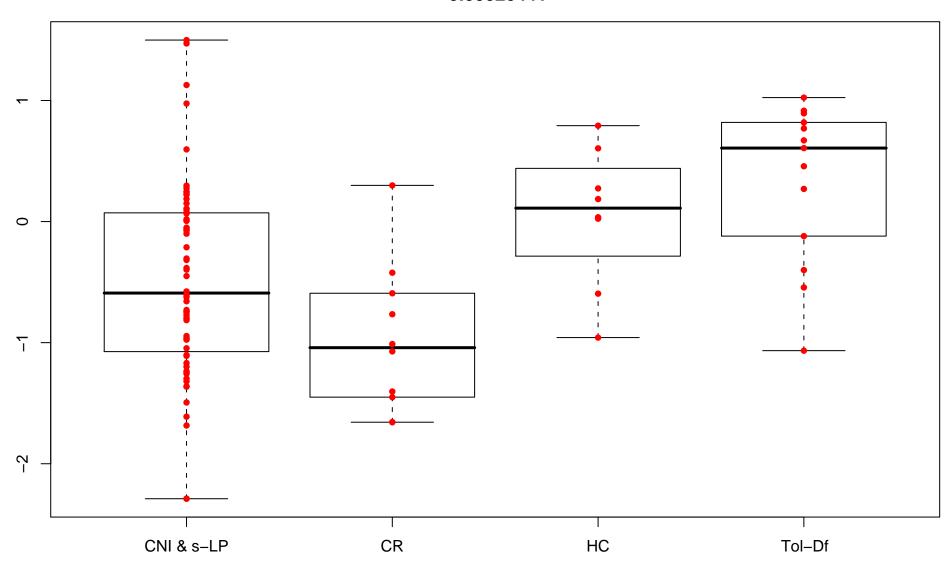
Rank 112 : TMTC3 0.00020146



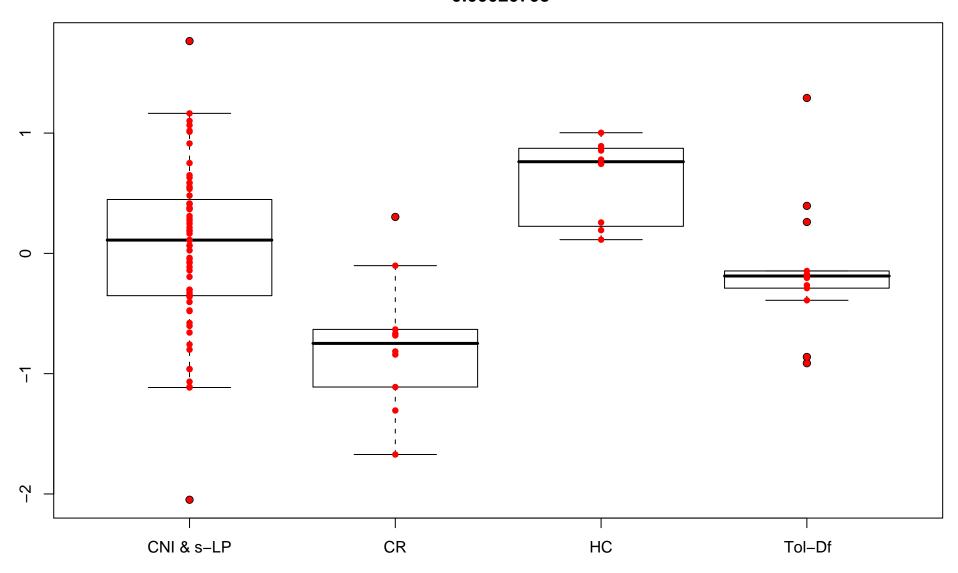
Rank 113 : MNAT1 0.00020319



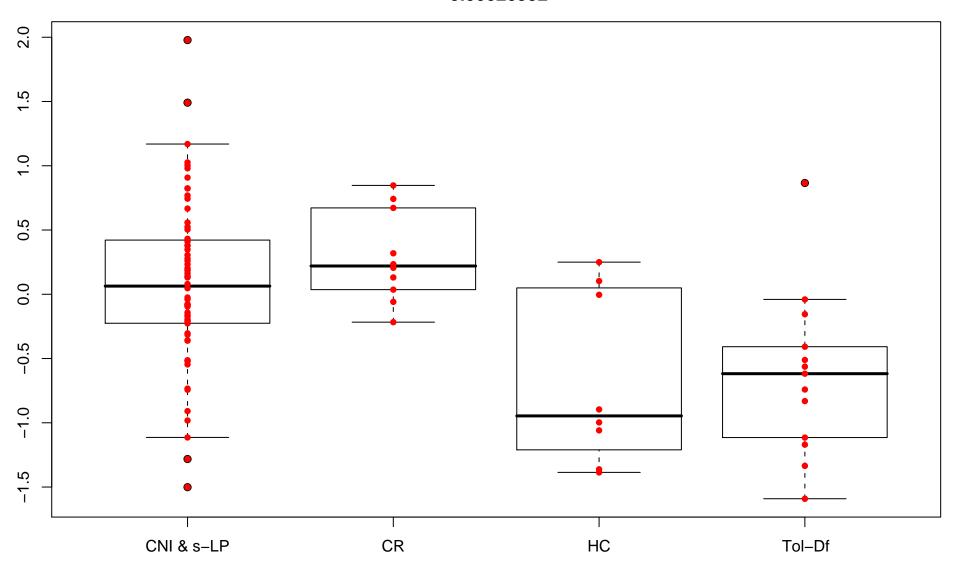
Rank 114 : ZNF181 0.00020441



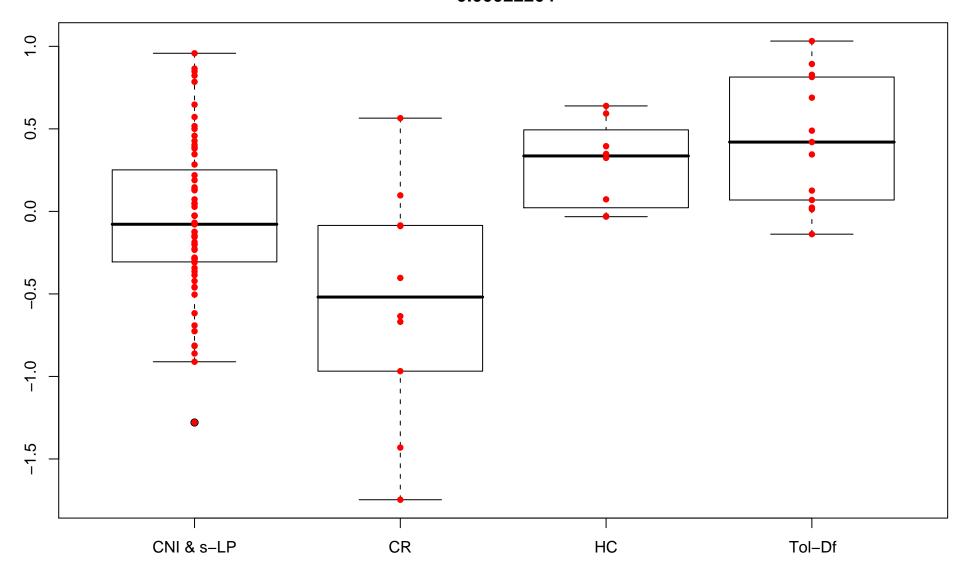
Rank 115 : MYC 0.00020703



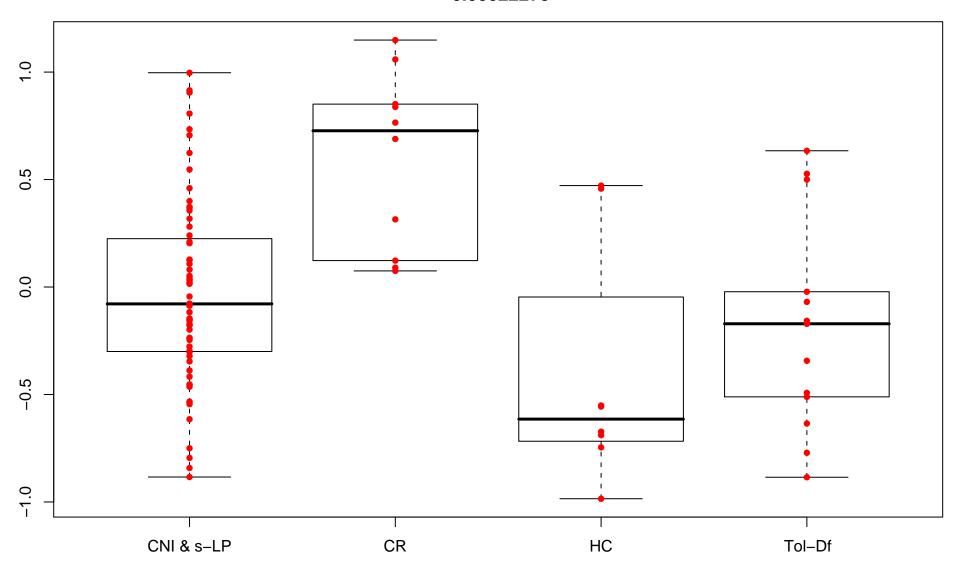
Rank 116 : CLEC5A 0.00020992



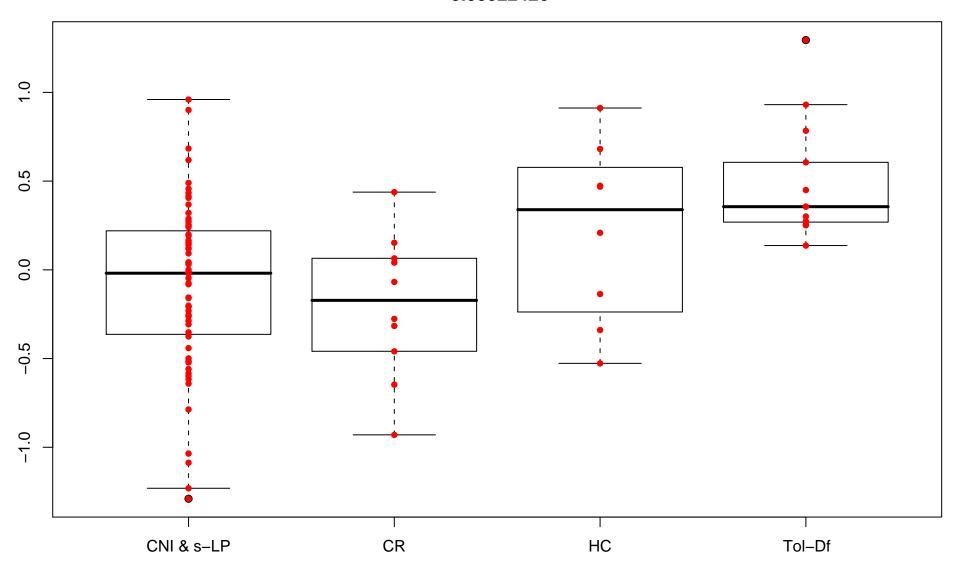
Rank 117 : GPX7 0.00022204



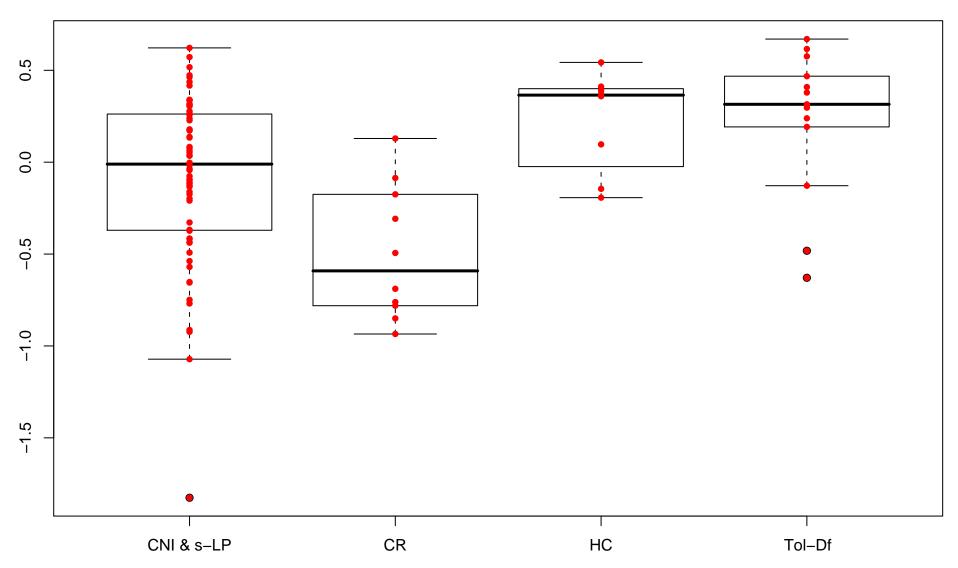
Rank 118 : HPN 0.00022275



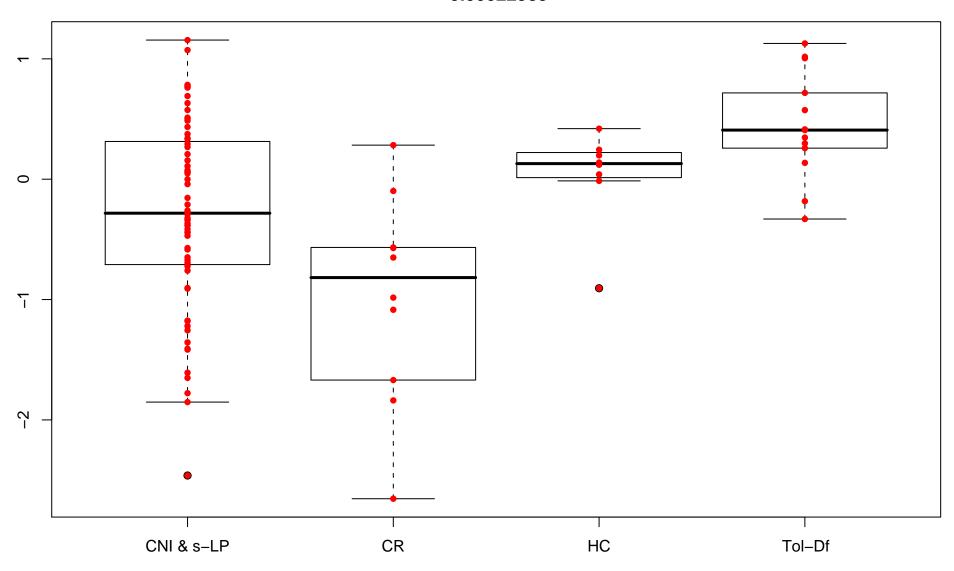
Rank 119 : PPIL3 0.00022426



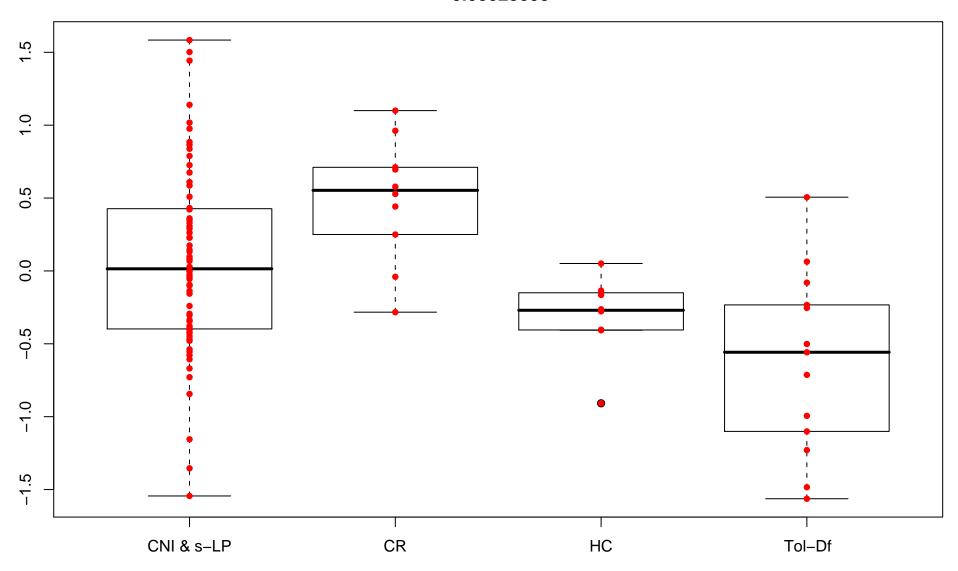
Rank 120 : THUMPD1 0.00022539



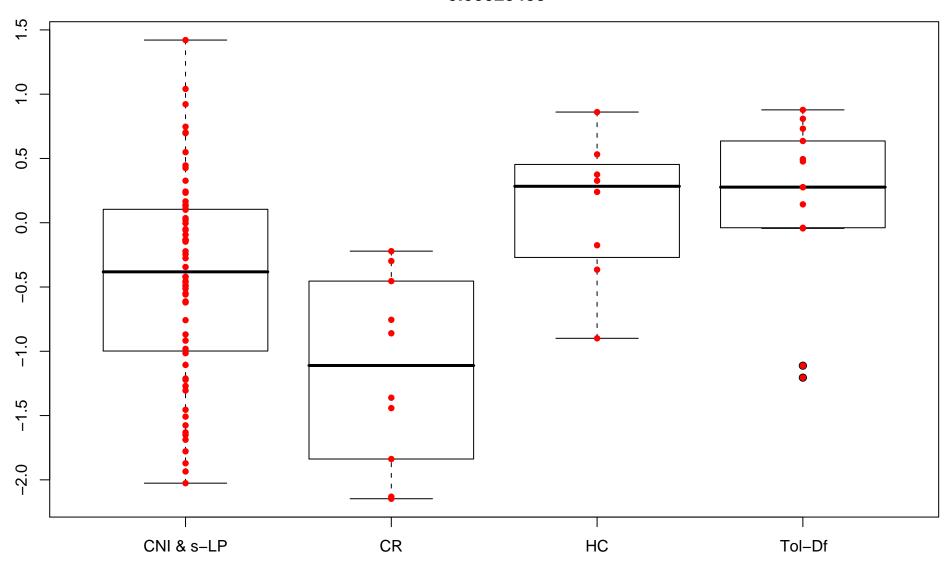
Rank 121 : MAD2L1 0.00022985



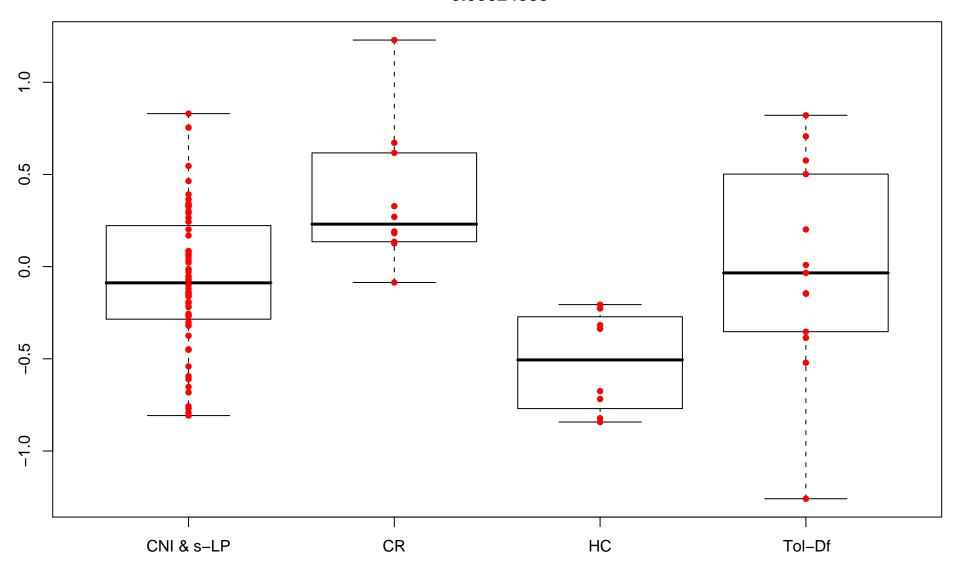
Rank 122 : SPTLC2 0.00023099



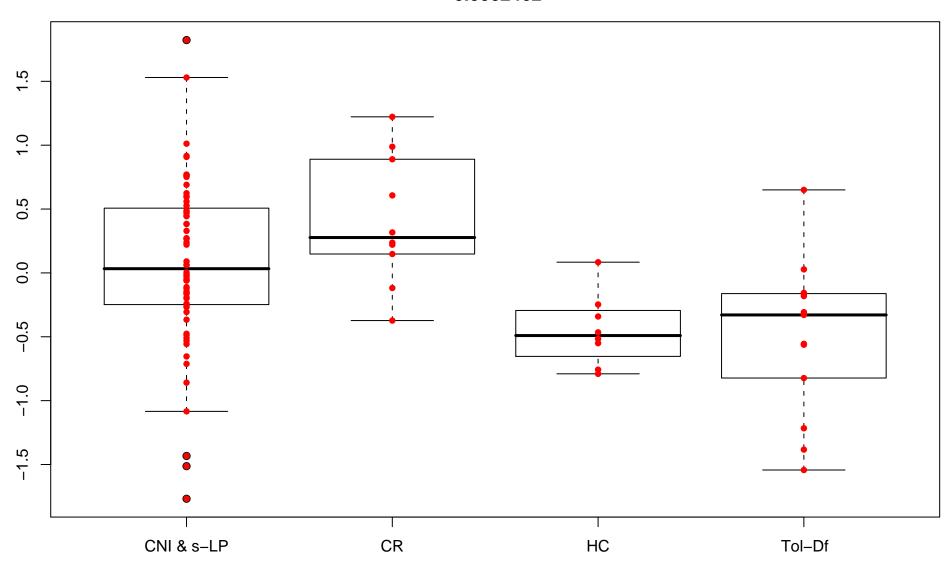
Rank 123 : THAP2 0.00023455



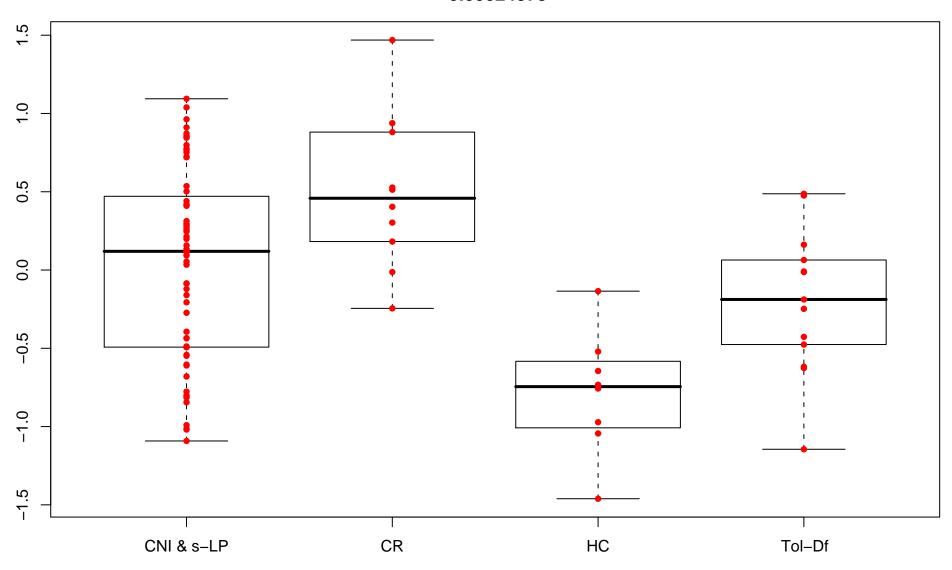
Rank 124 : CRYAB 0.00024539



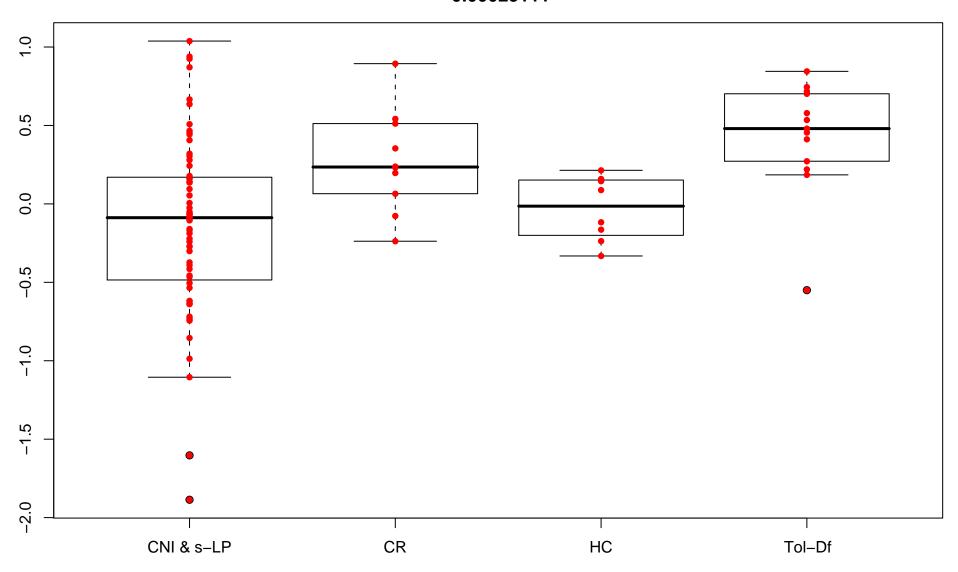
Rank 125 : C8ORF60 0.0002462



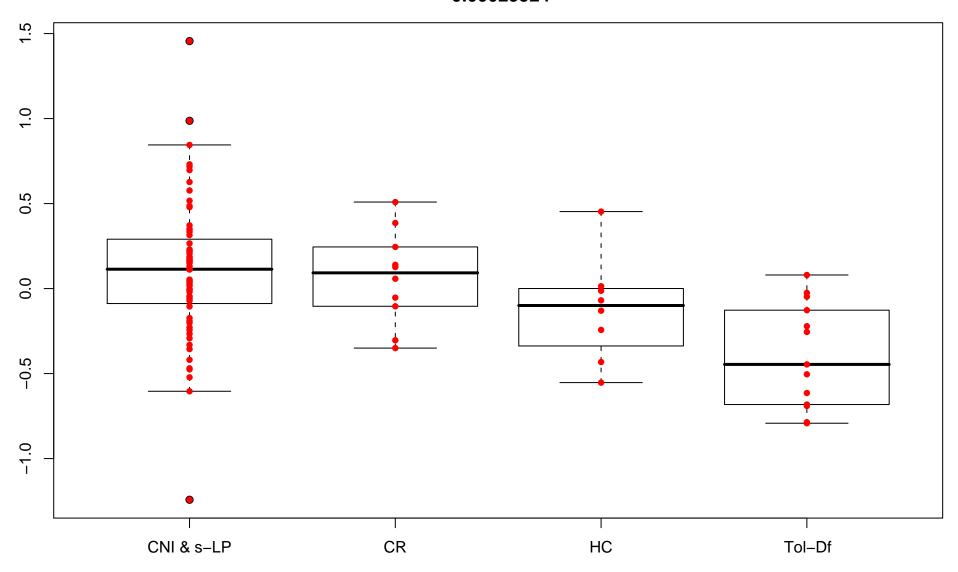
Rank 126 : MXD1 0.00024878



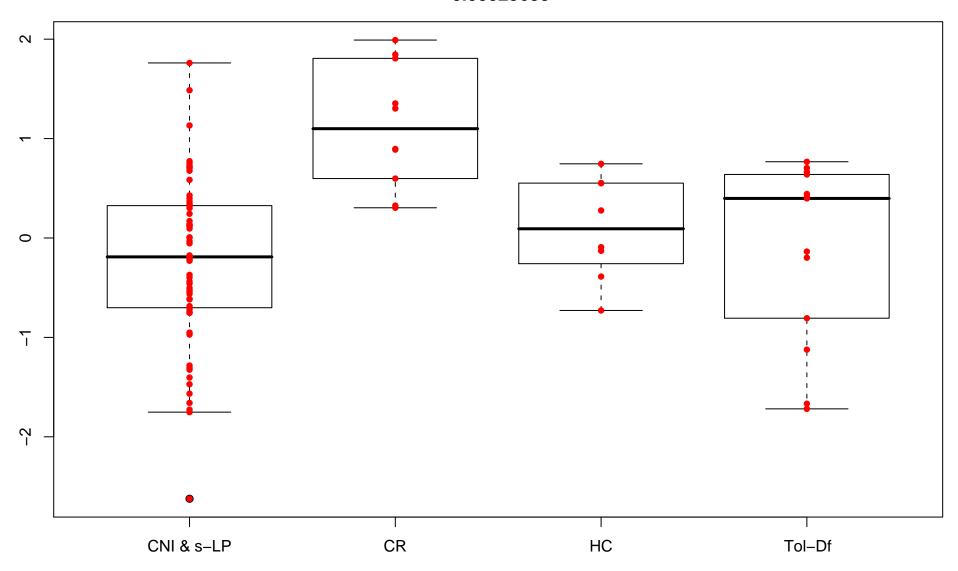
Rank 127 : MATK 0.00025111



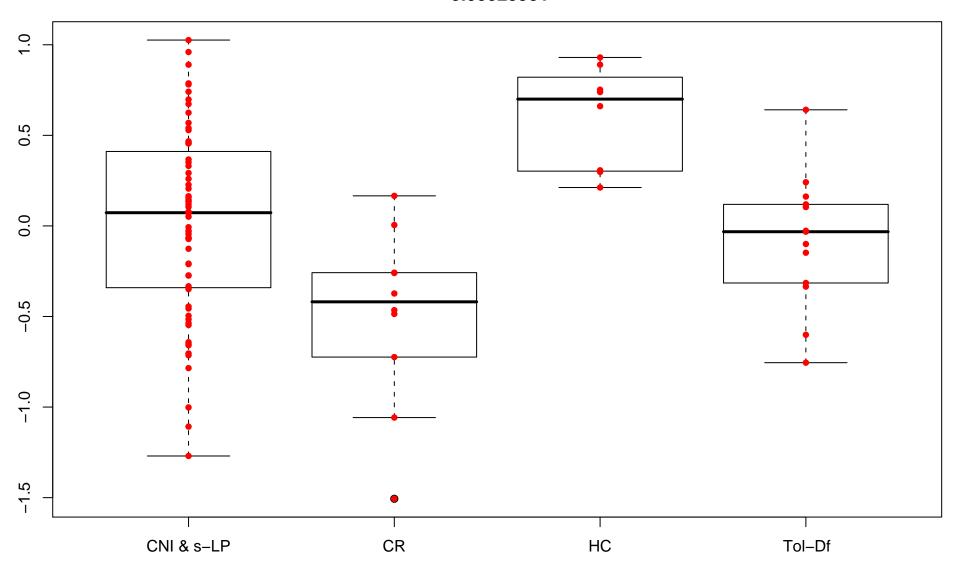
Rank 128 : LYN 0.00025524



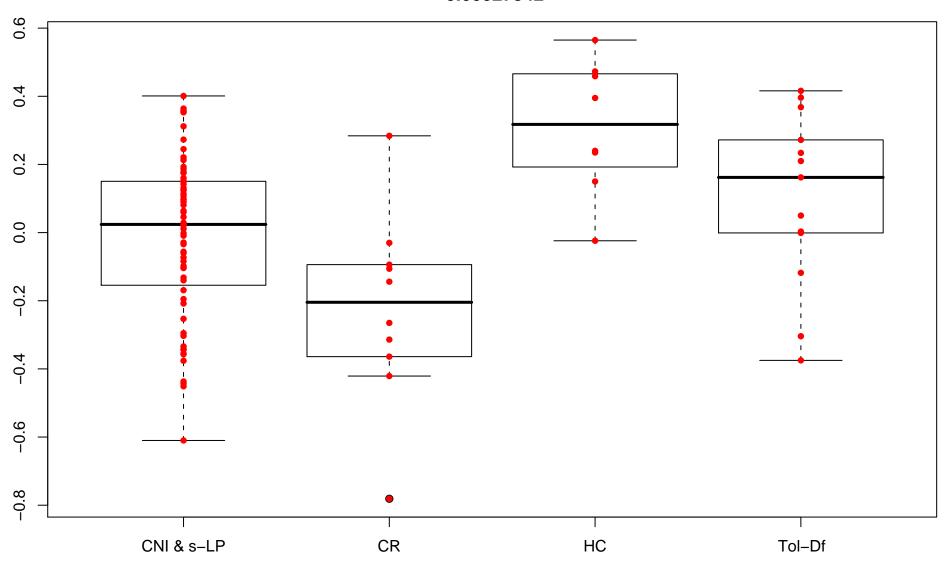
Rank 129 : LGALS2 0.00025635



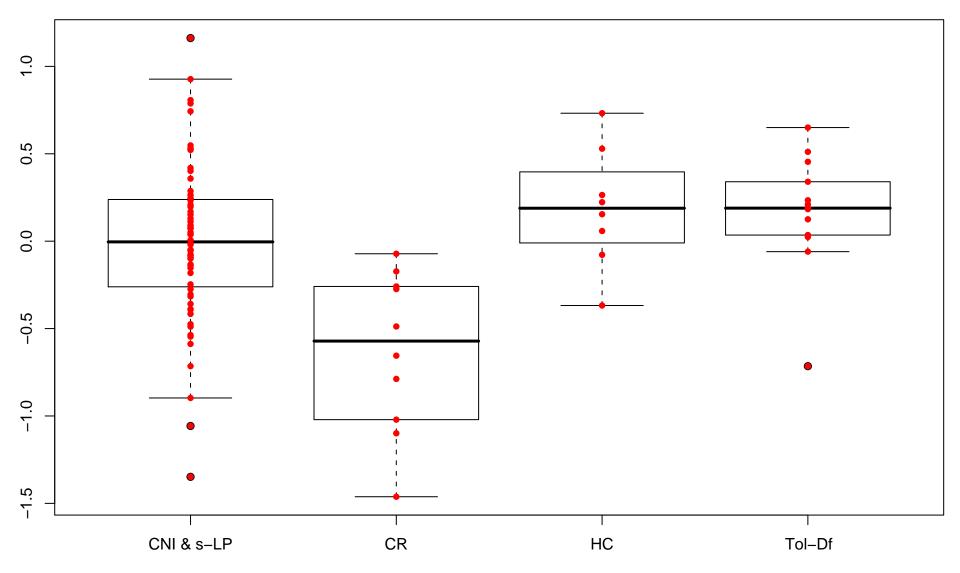
Rank 130 : SEPT9 0.00025951



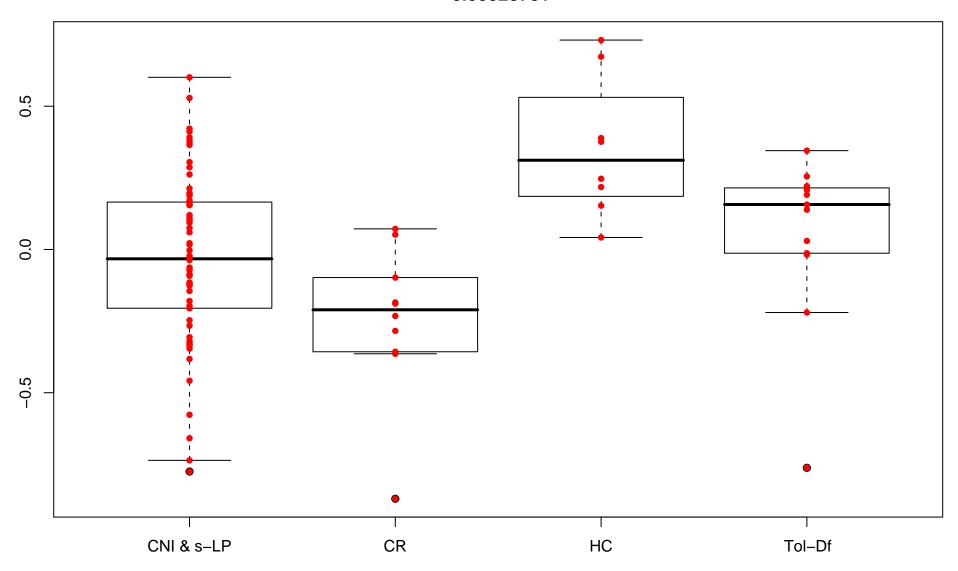
Rank 131 : PDCD6 0.00027342



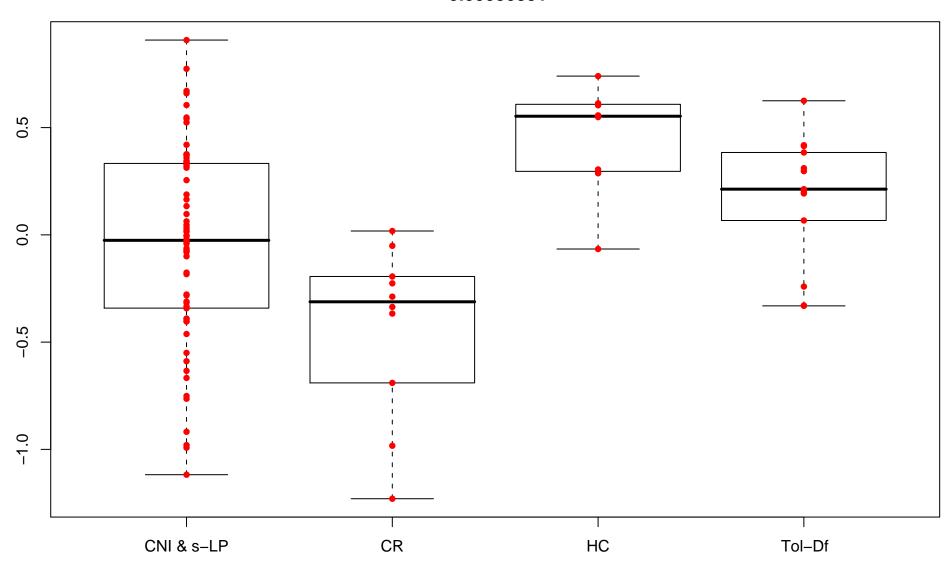
Rank 132 : DCLRE1A 0.00027807



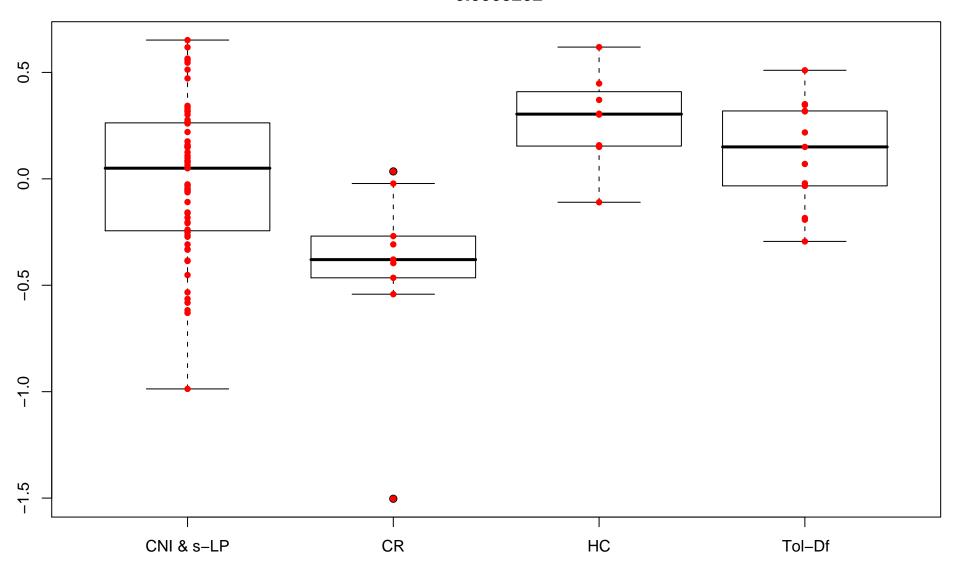
Rank 133 : IL10RA 0.00028781



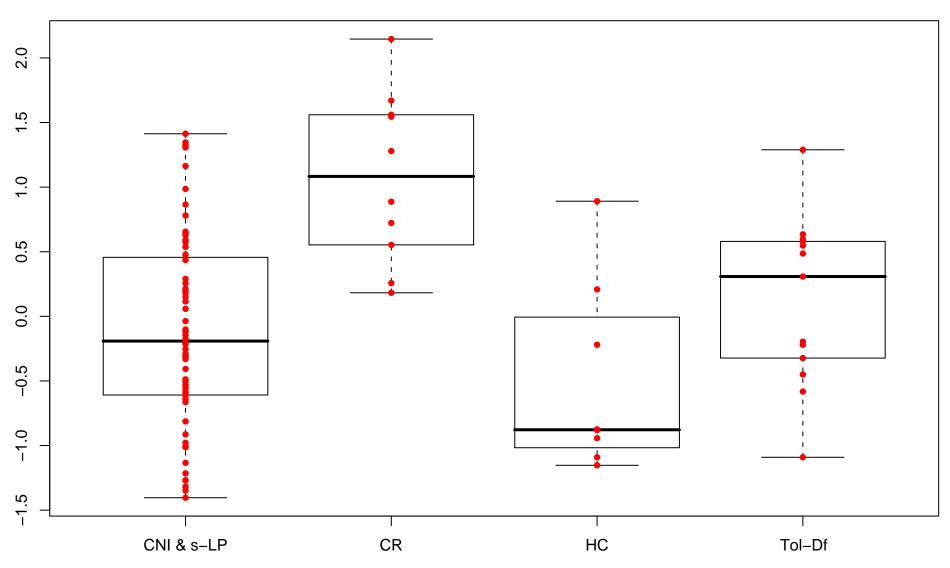
Rank 134 : MAGEH1 0.00030851



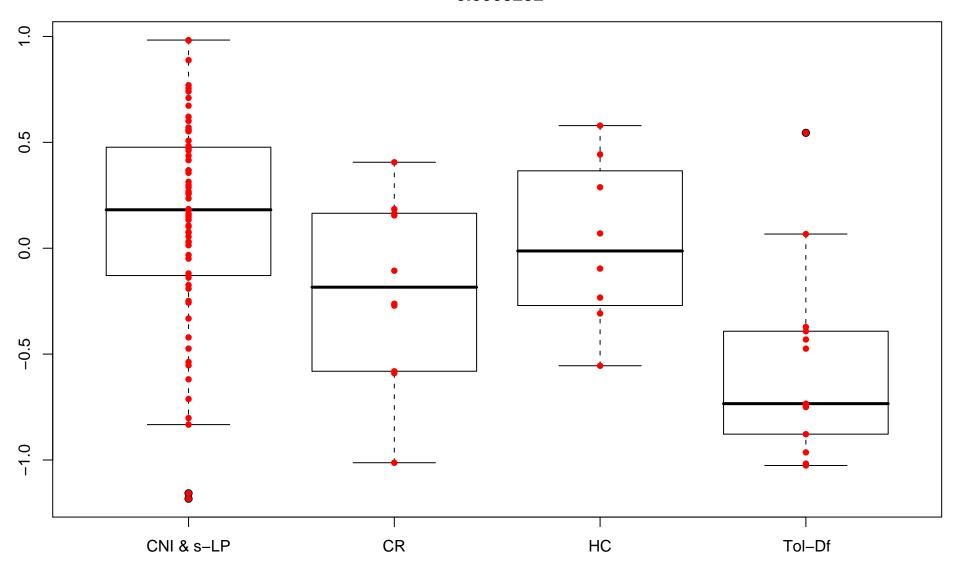
Rank 135 : LOC550643 0.0003202



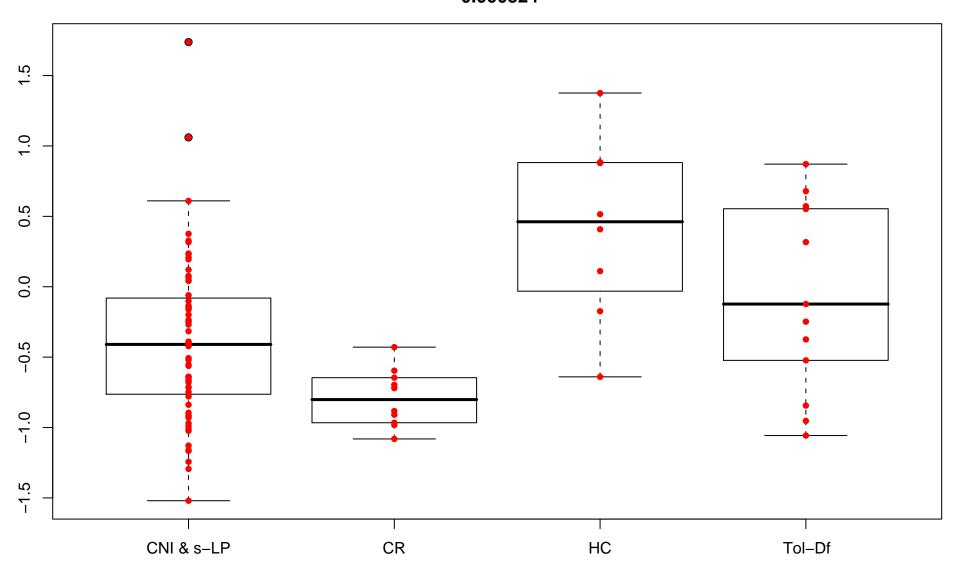
Rank 136 : SLC25A37 0.0003212



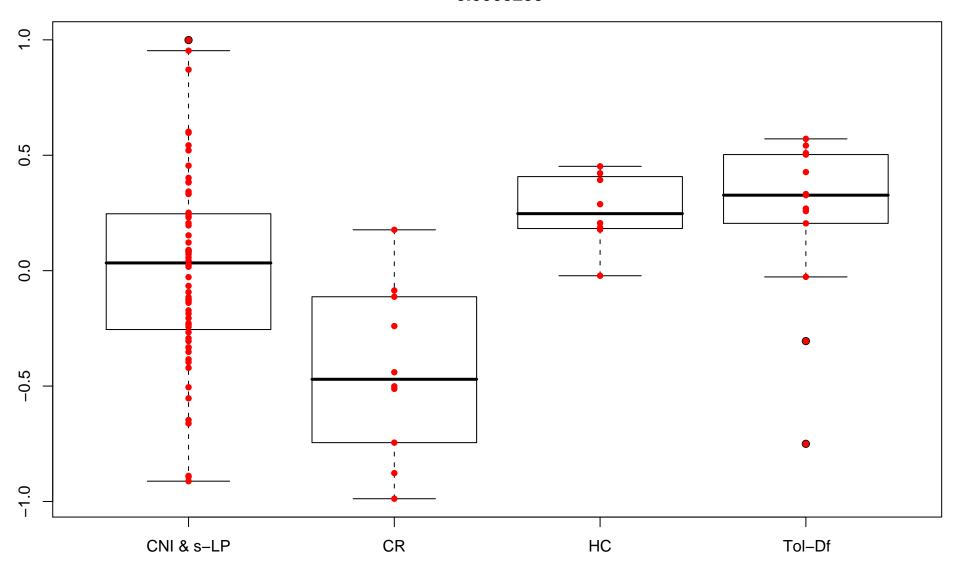
Rank 137 : CARD6 0.0003232



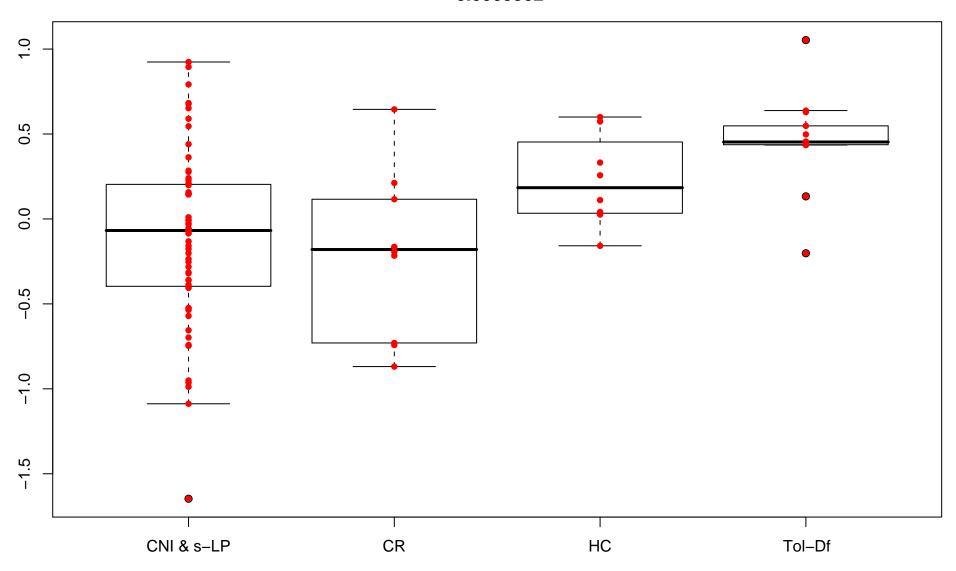
Rank 138 : ZFP2 0.000324



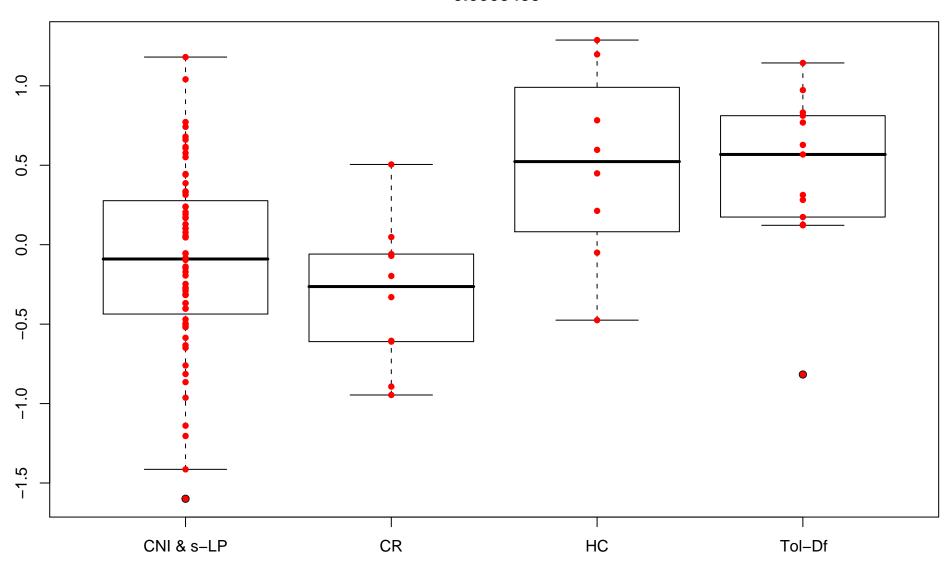
Rank 139 : PTMA 0.0003259



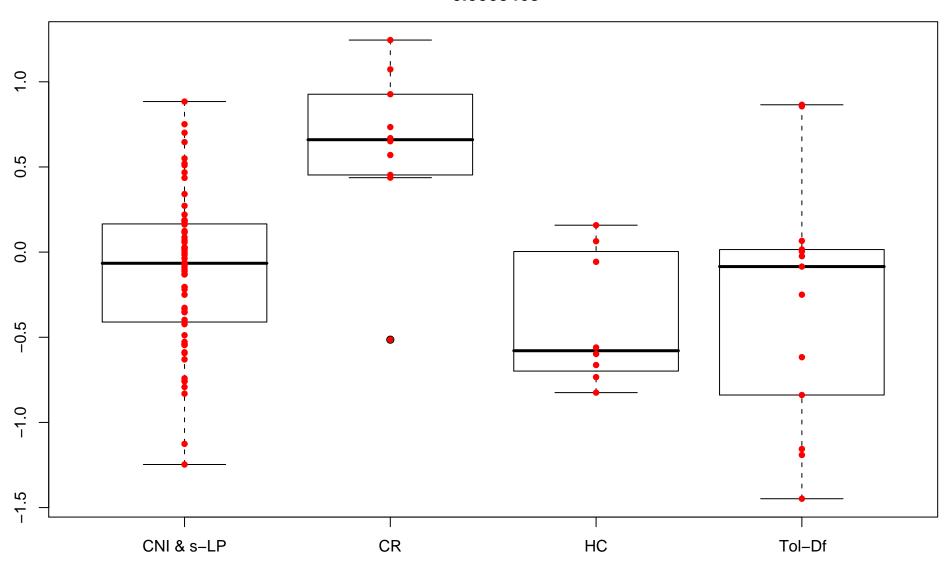
Rank 140 : BACE2 0.0003302



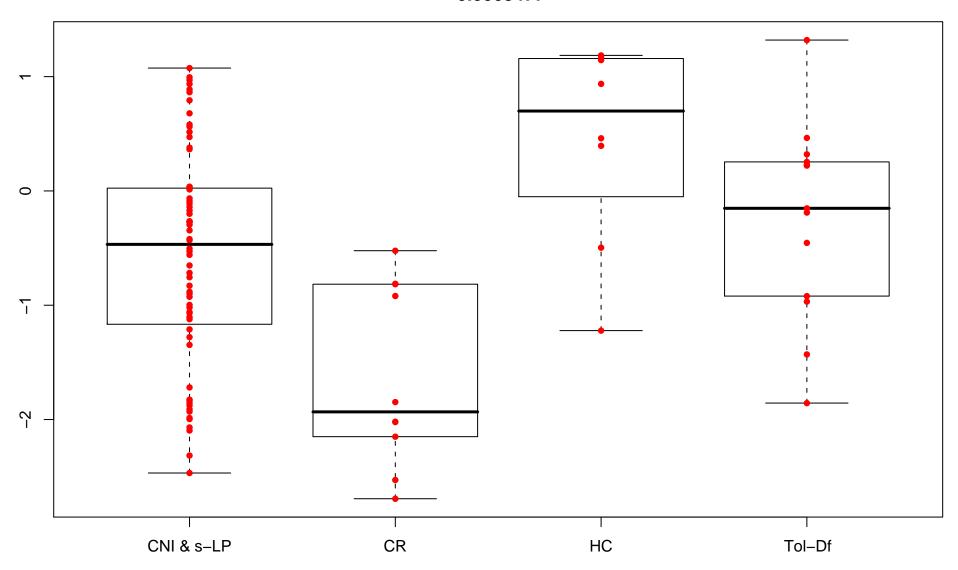
Rank 141 : CHST2 0.0003439



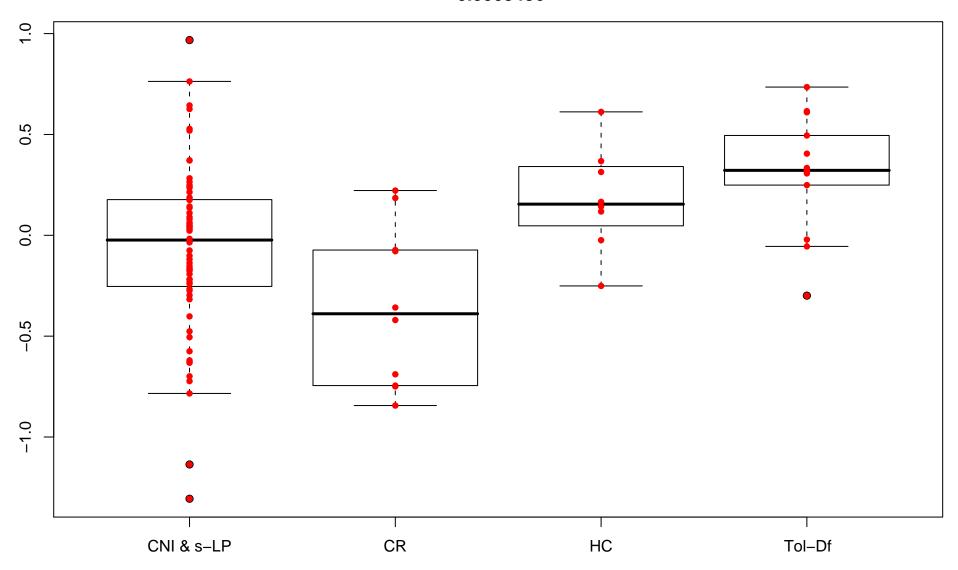
Rank 142 : MUC5AC 0.0003463



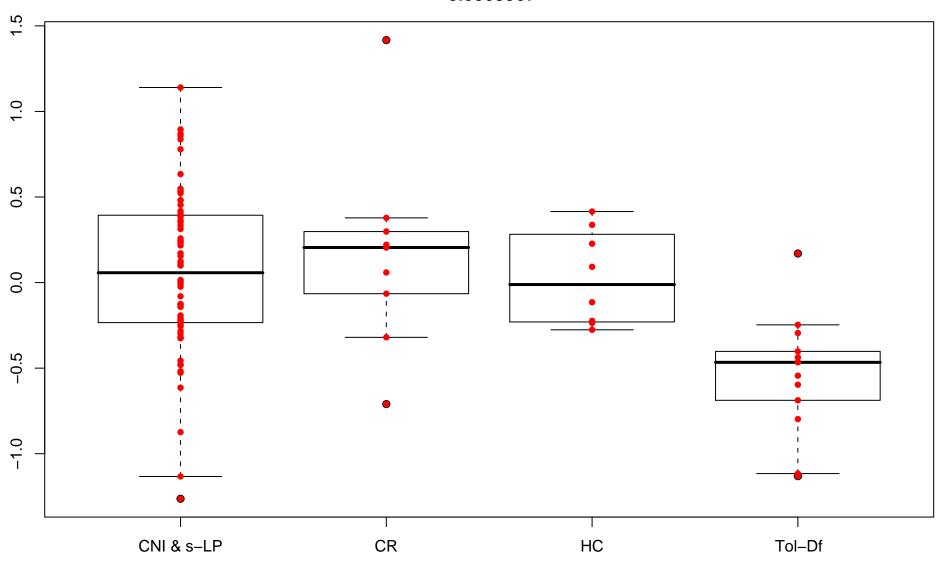
Rank 143 : BCKDHB 0.0003477



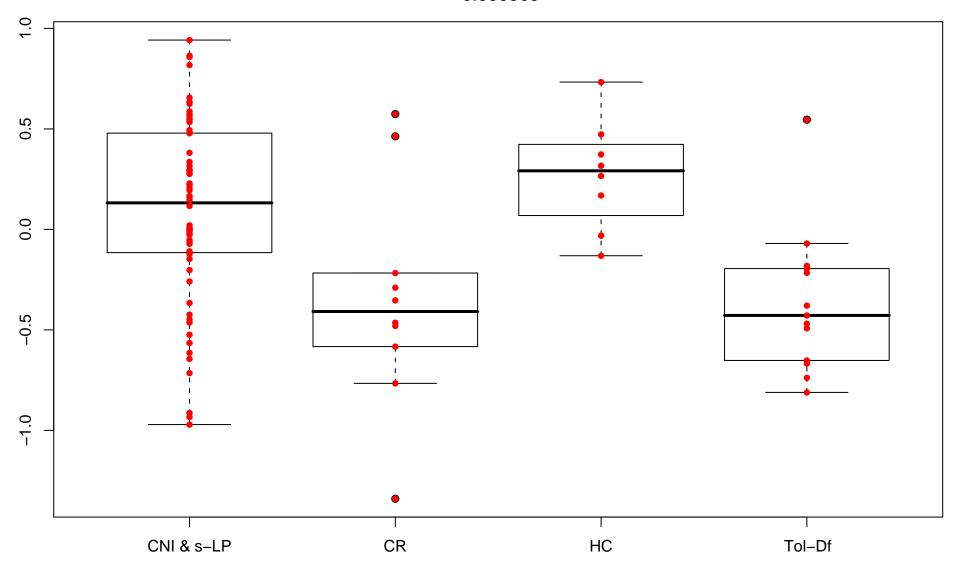
Rank 144 : MTX2 0.0003486



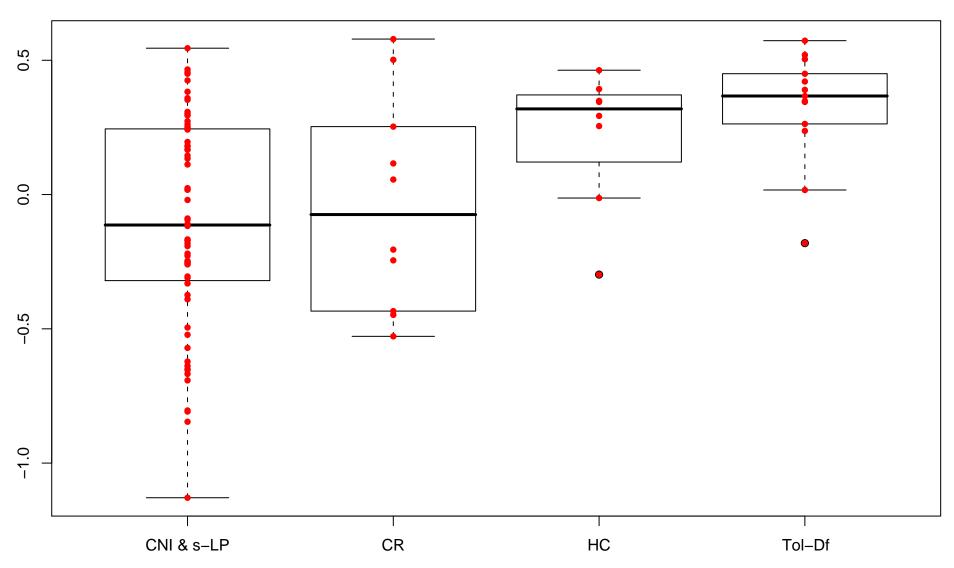
Rank 145 : QSOX1 0.0003567



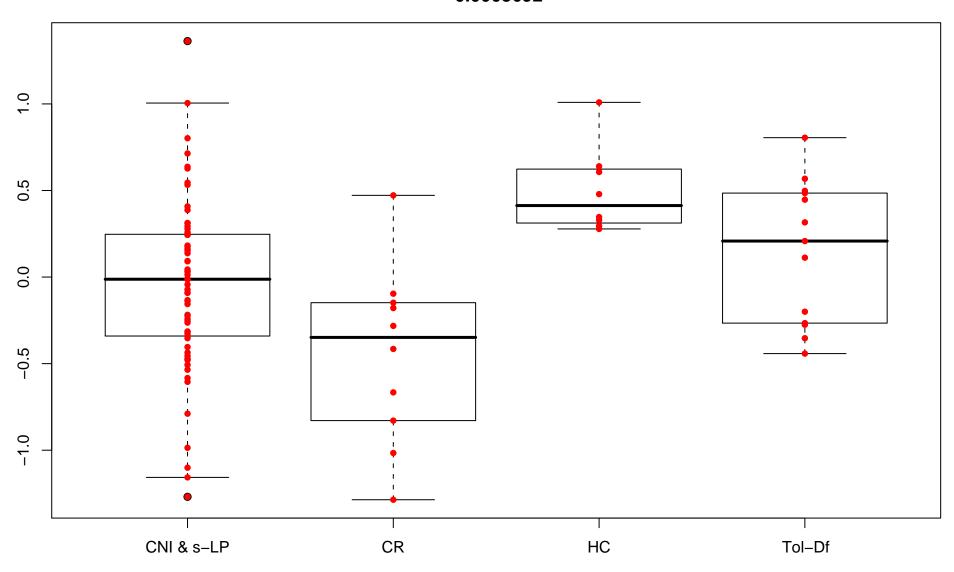
Rank 146 : PKM2 0.000365



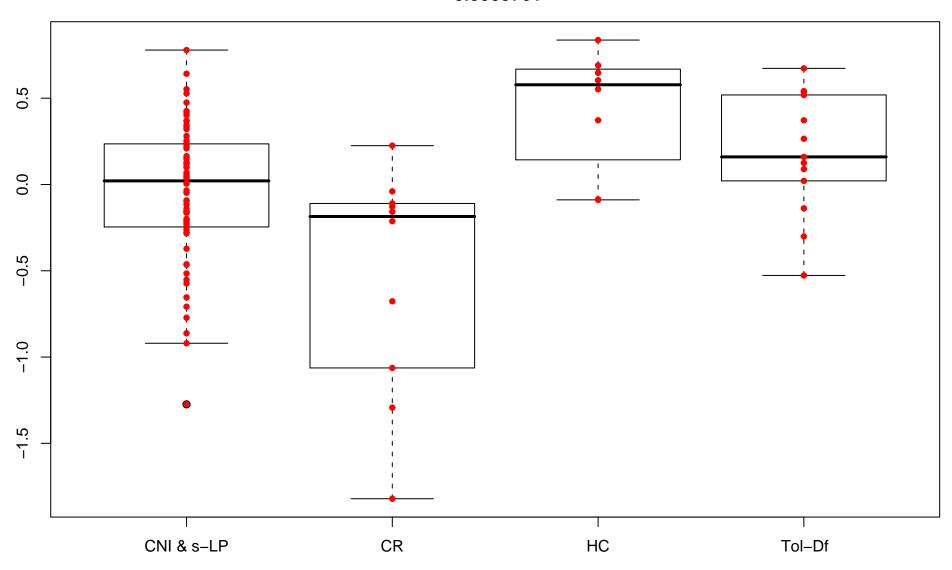
Rank 147 : ITGB1BP1 0.0003666



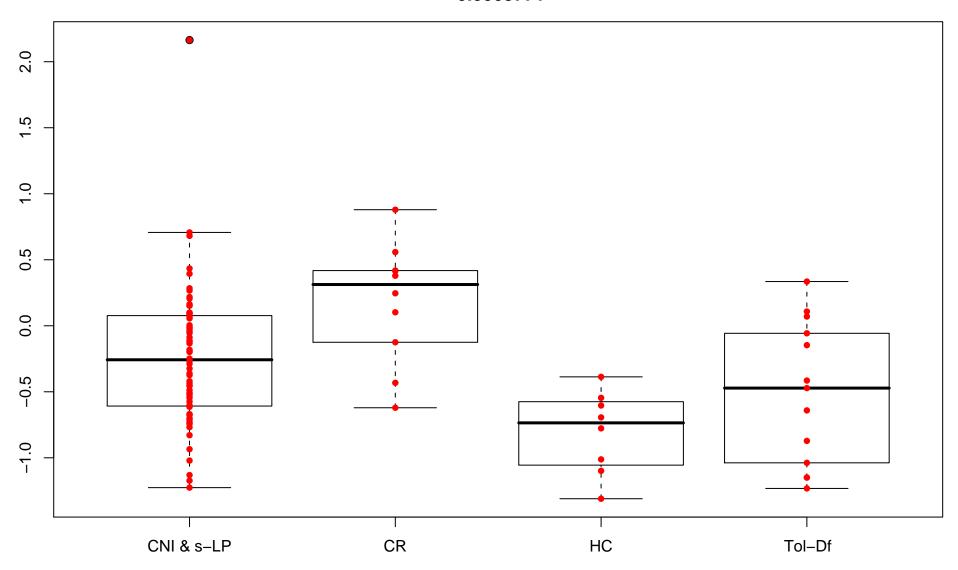
Rank 148 : CD7 0.0003692



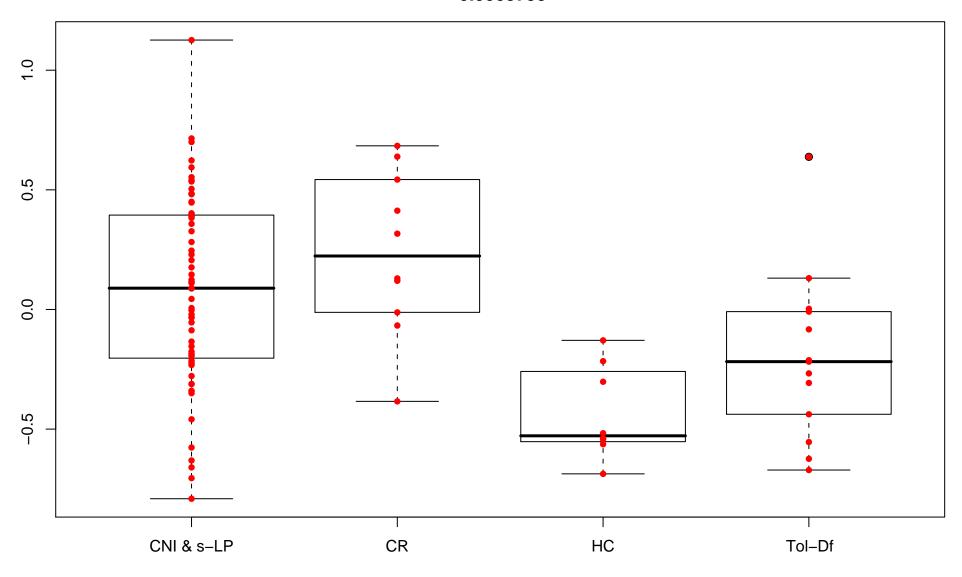
Rank 149 : ACOT2 0.0003761



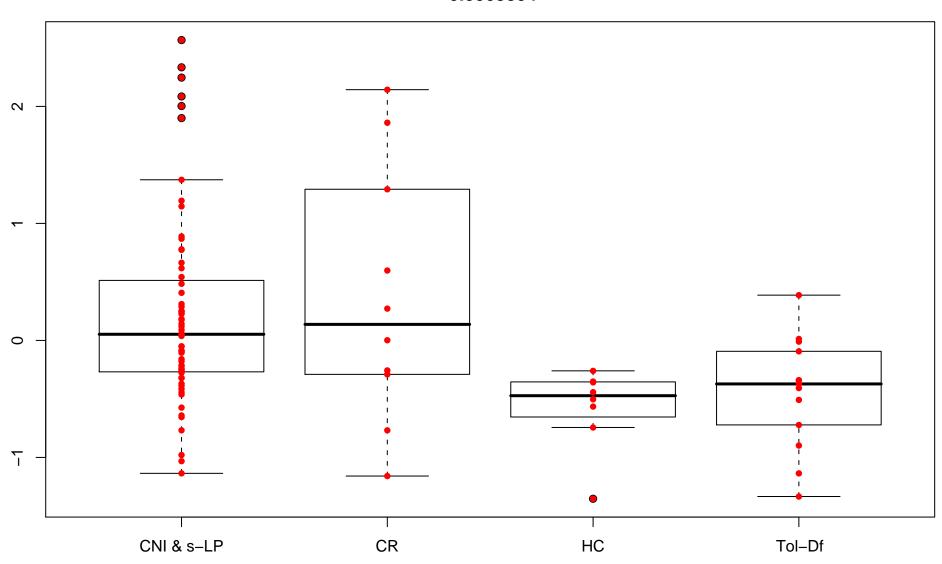
Rank 150 : SEPT3 0.0003771



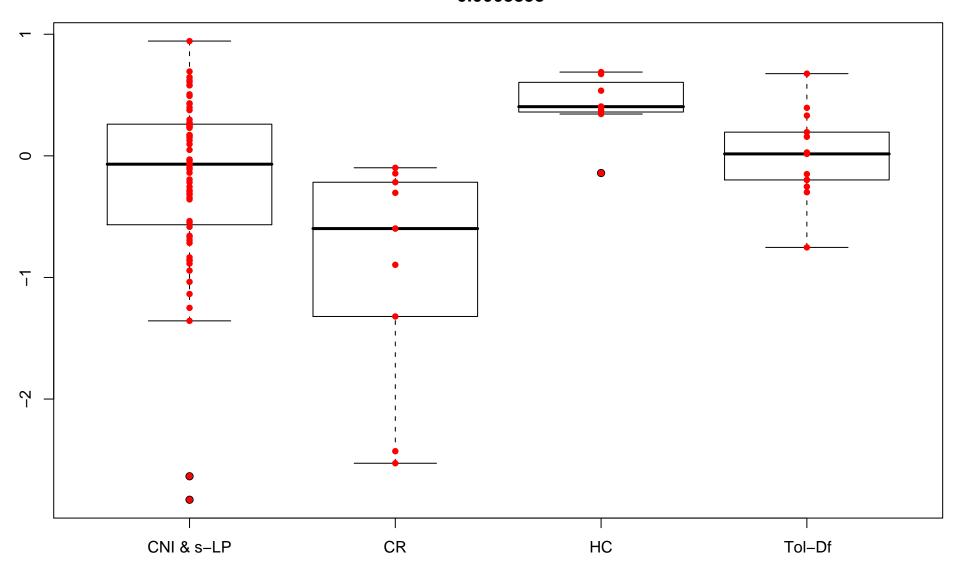
Rank 151 : RTN3 0.0003799



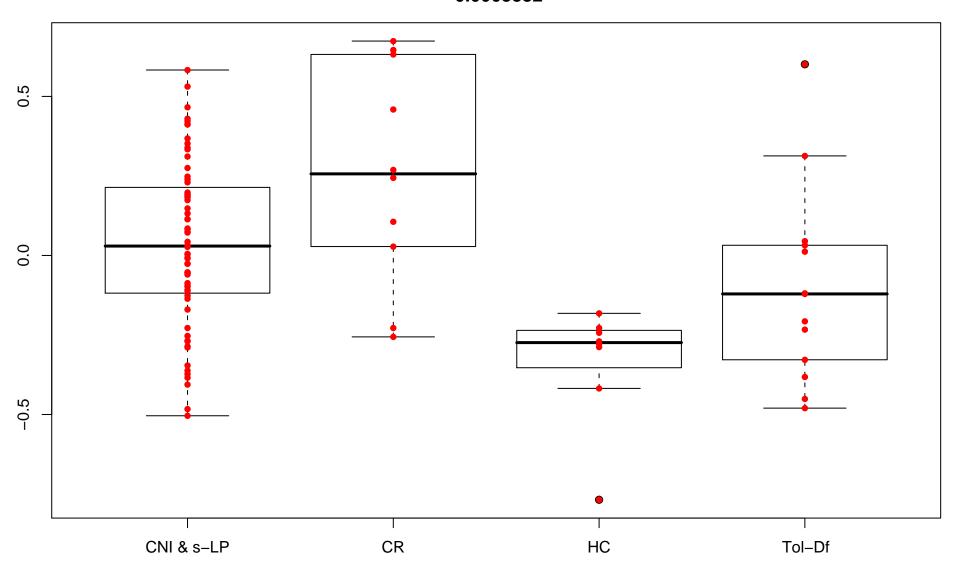
Rank 152 : FKBP5 0.0003804



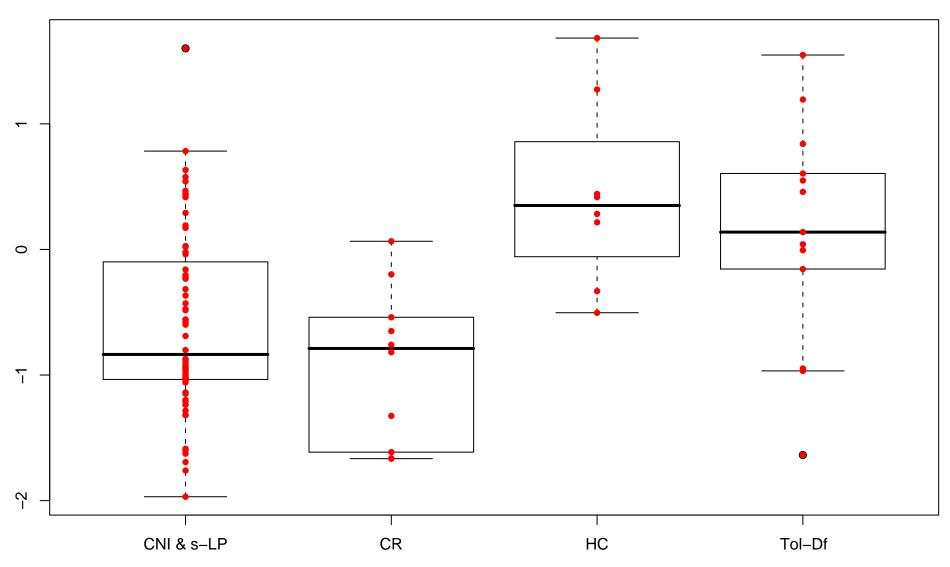
Rank 153 : CD40LG 0.0003853



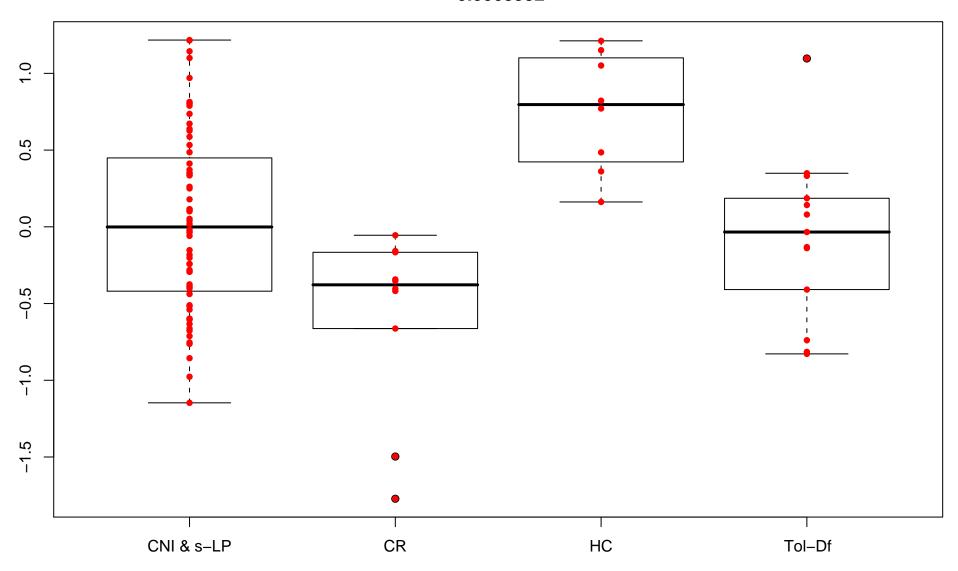
Rank 154 : AIM1 0.0003882



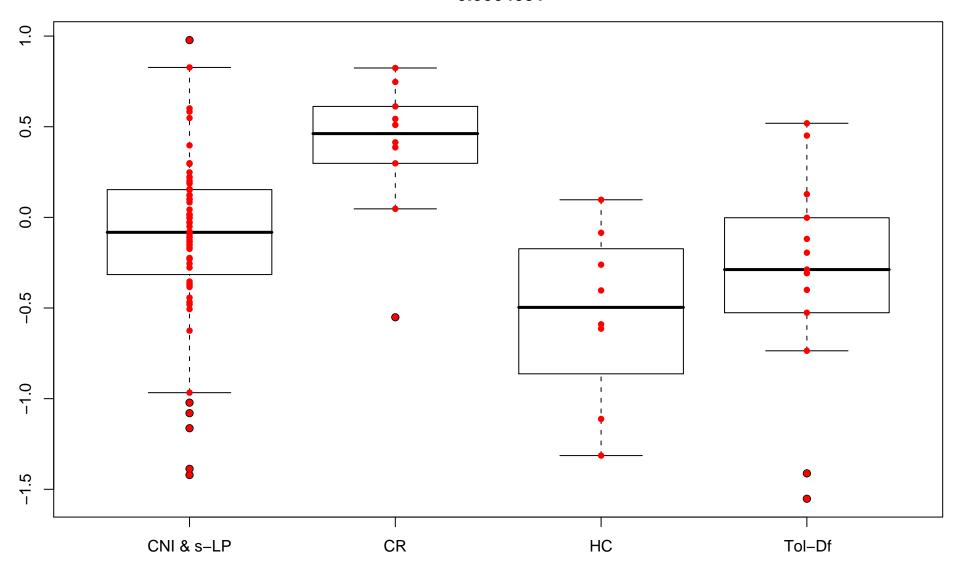
Rank 155 : FANK1 0.0003884



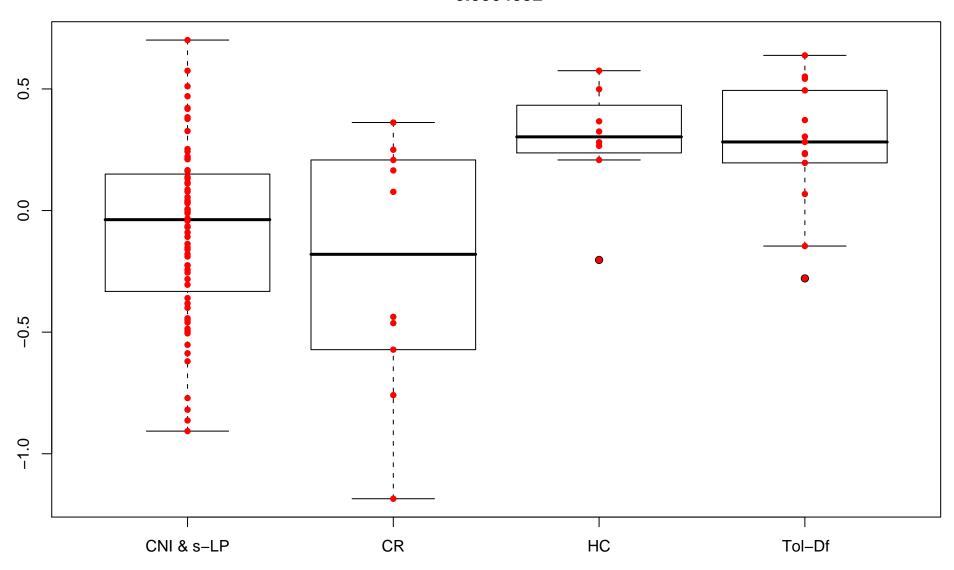
Rank 156 : DNMT1 0.0003952



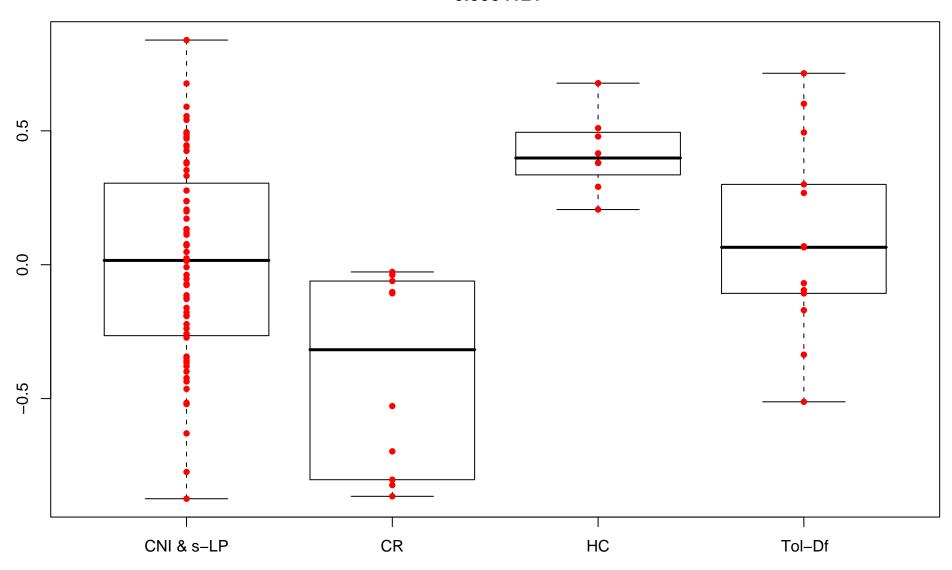
Rank 157 : AK3L1 0.0004051



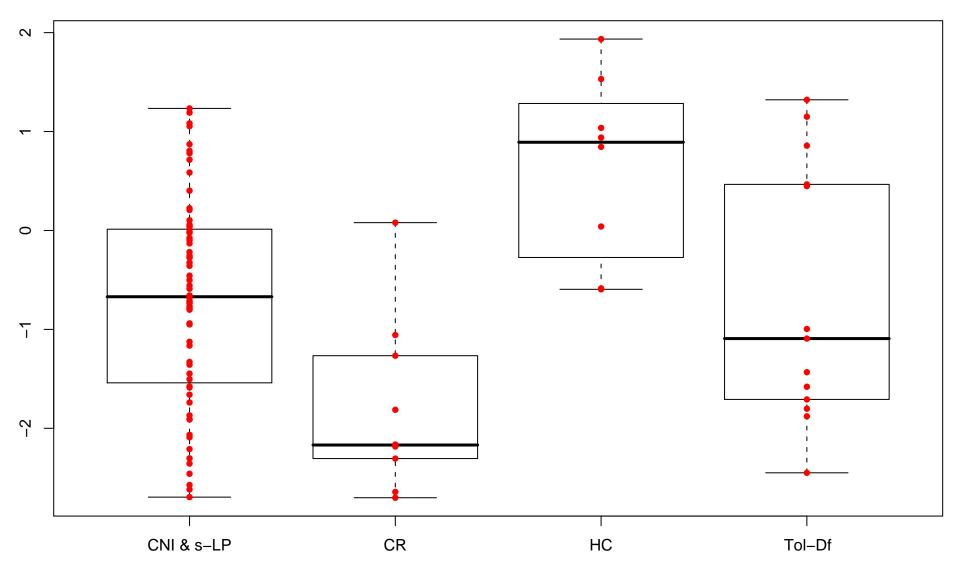
Rank 158 : RFC4 0.0004052



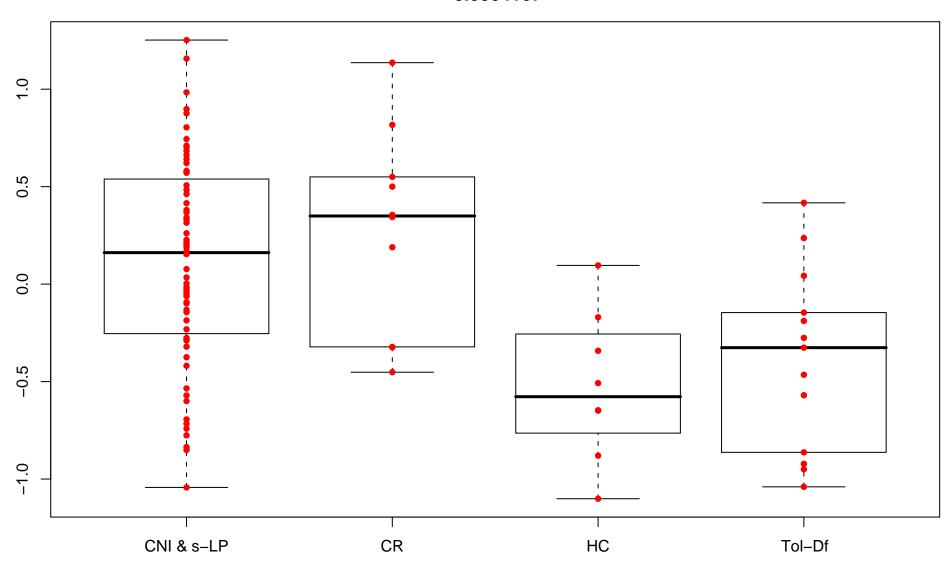
Rank 159 : BTG1 0.0004121



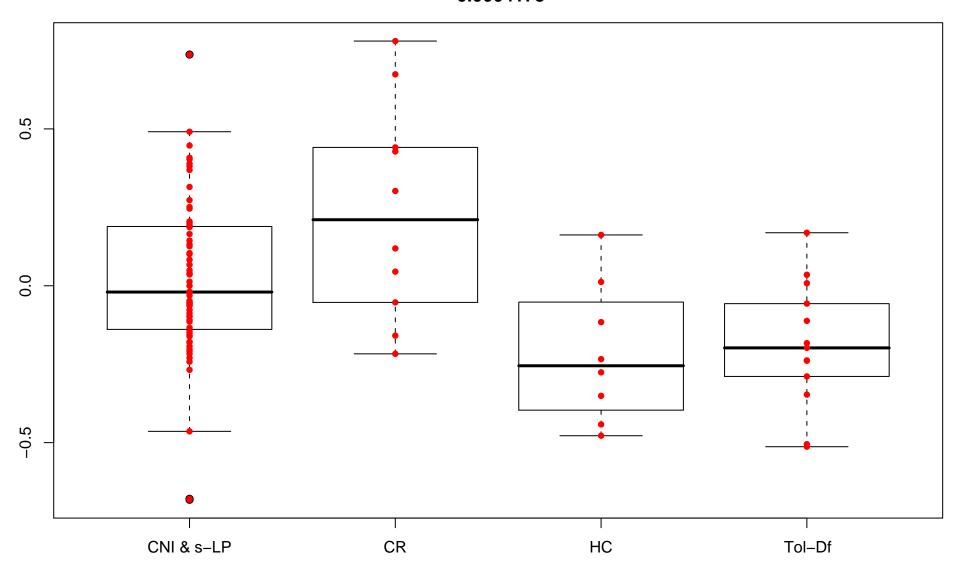
Rank 160 : SPON1 0.0004152



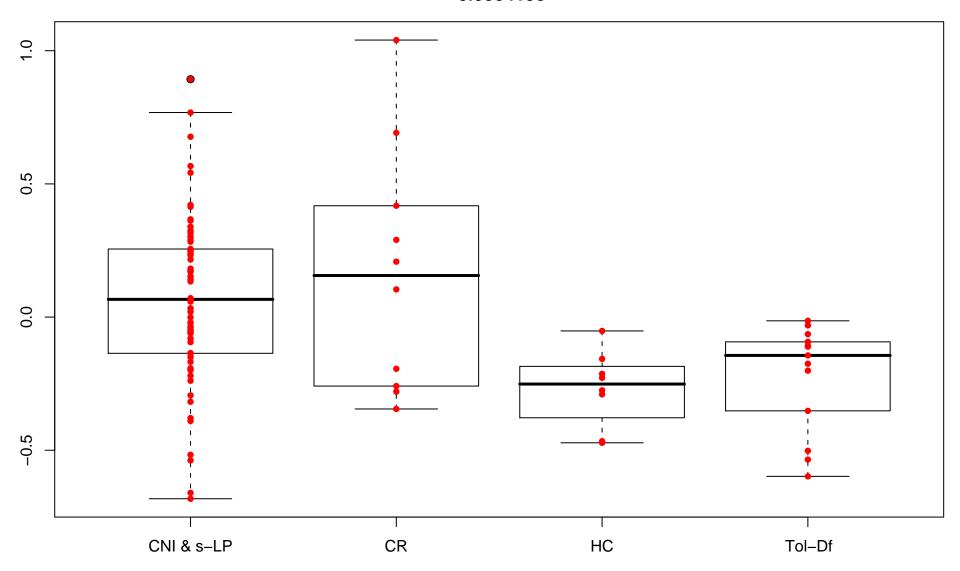
Rank 161 : KCNJ15 0.0004167



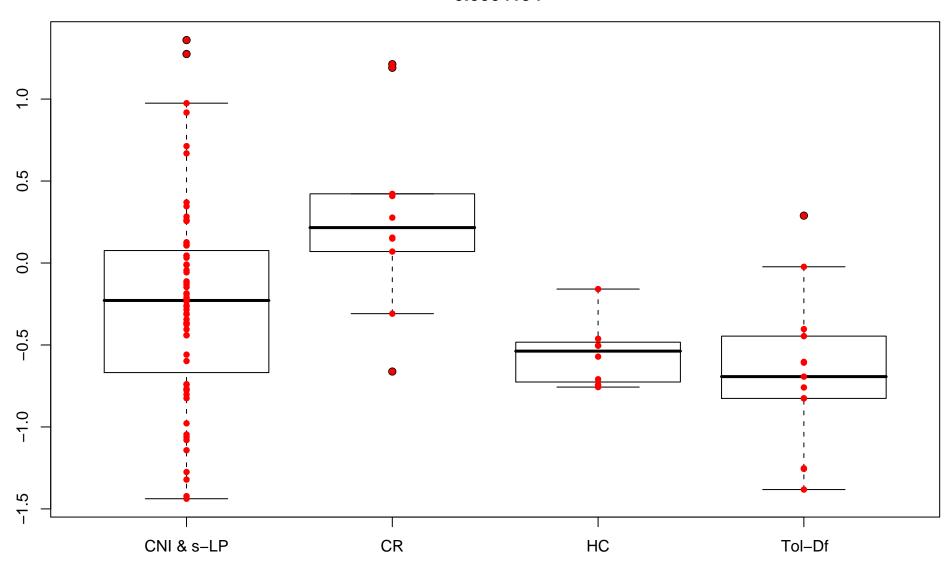
Rank 162 : ATL3 0.0004178



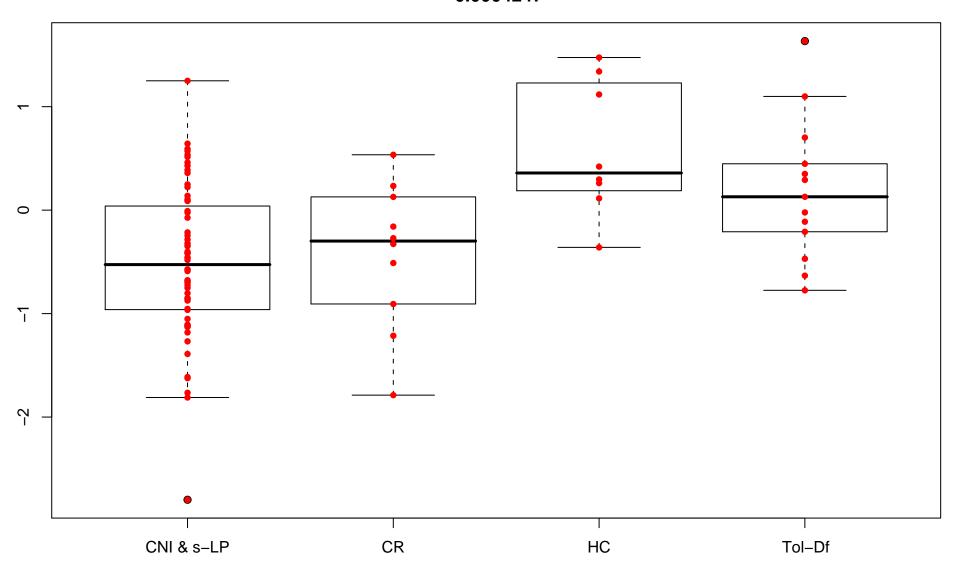
Rank 163 : APH1B 0.0004193



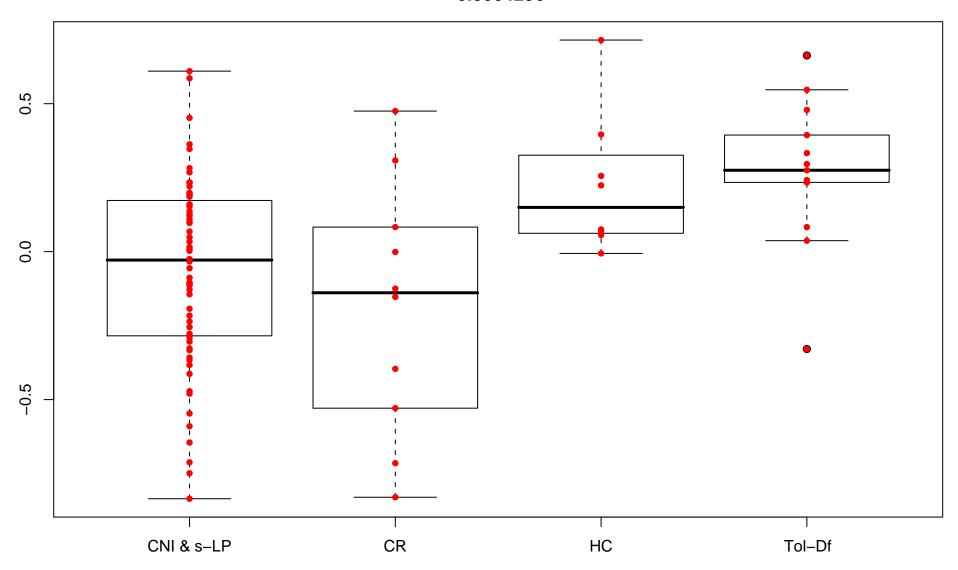
Rank 164 : LRRC18 0.0004194



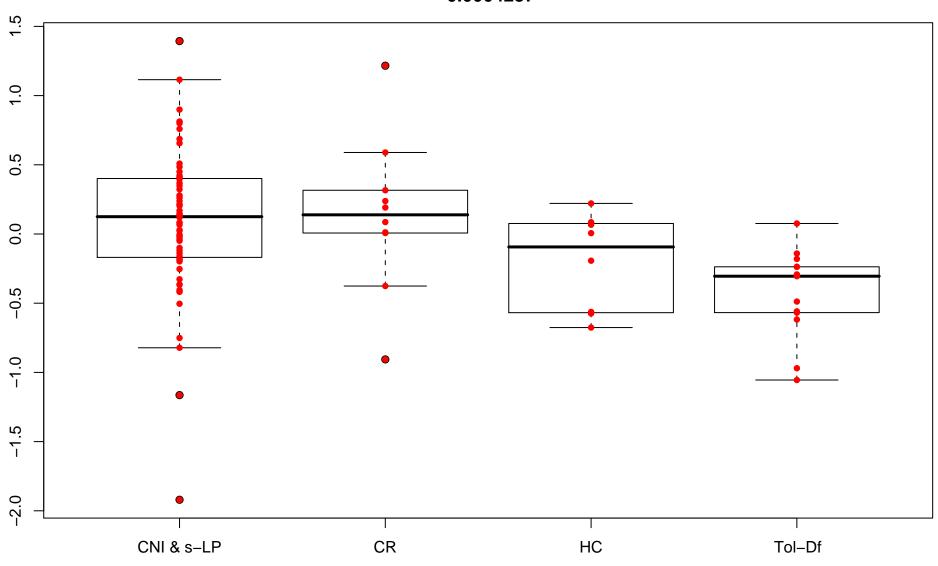
Rank 165 : AFF3 0.0004247



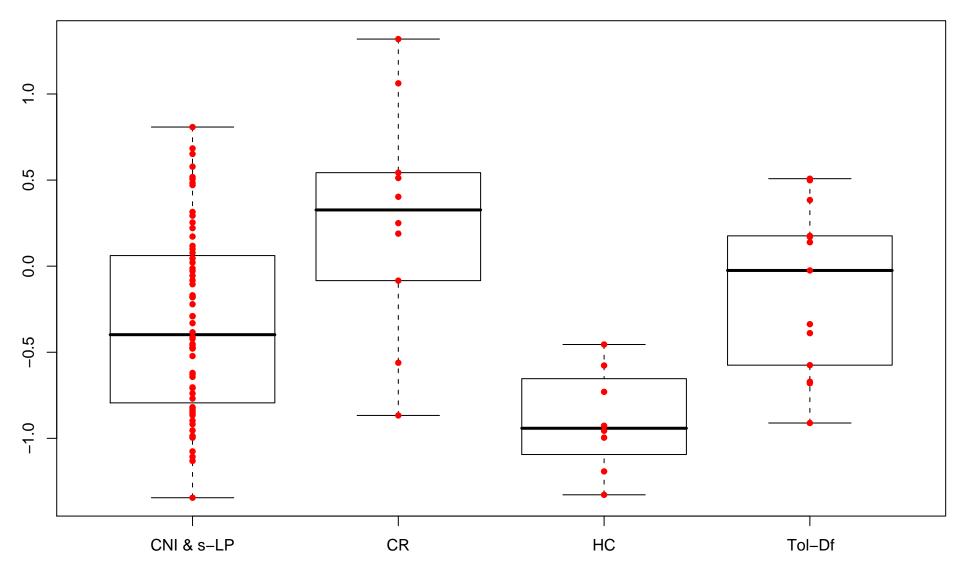
Rank 166 : MCEE 0.0004256



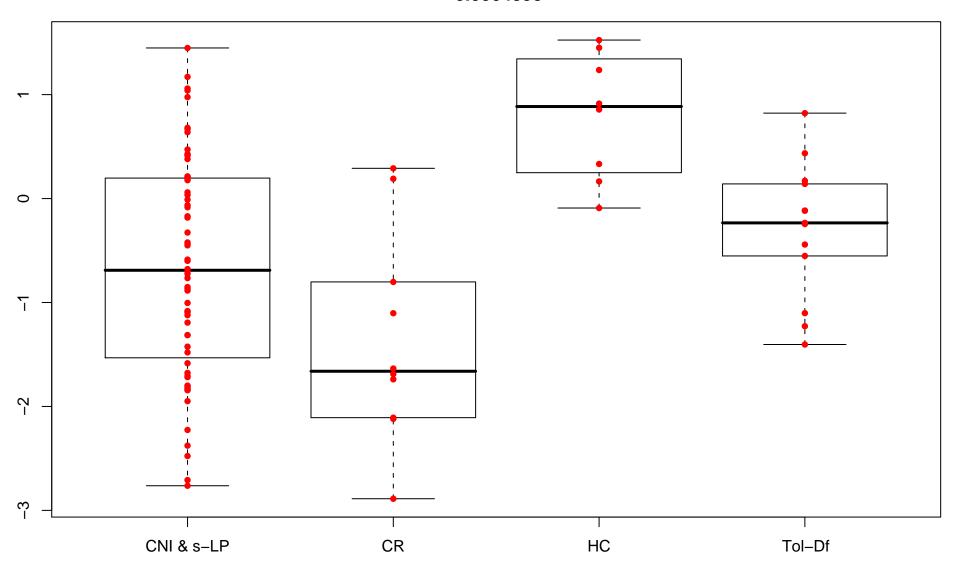
Rank 167: NLRC4 0.0004287



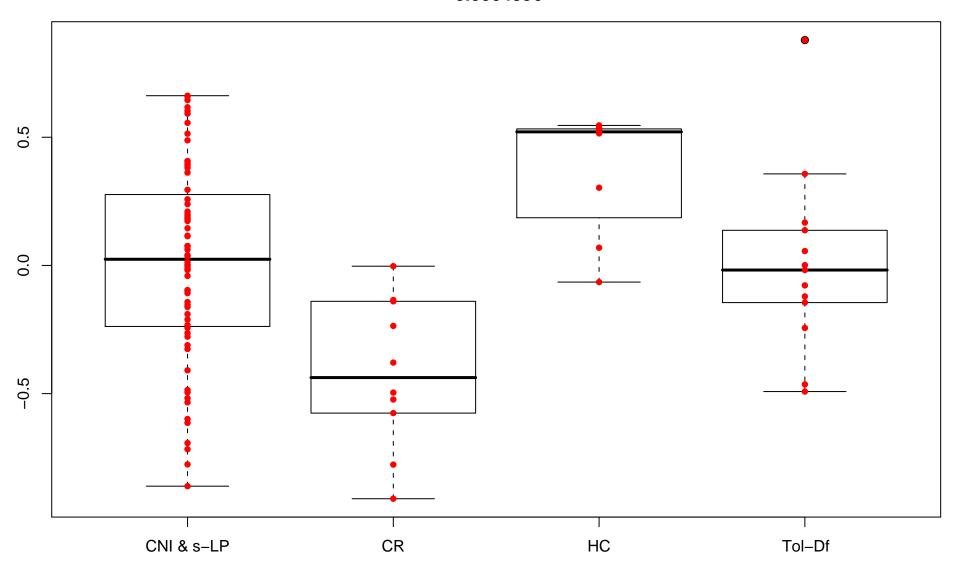
Rank 168 : PLA1A 0.0004346



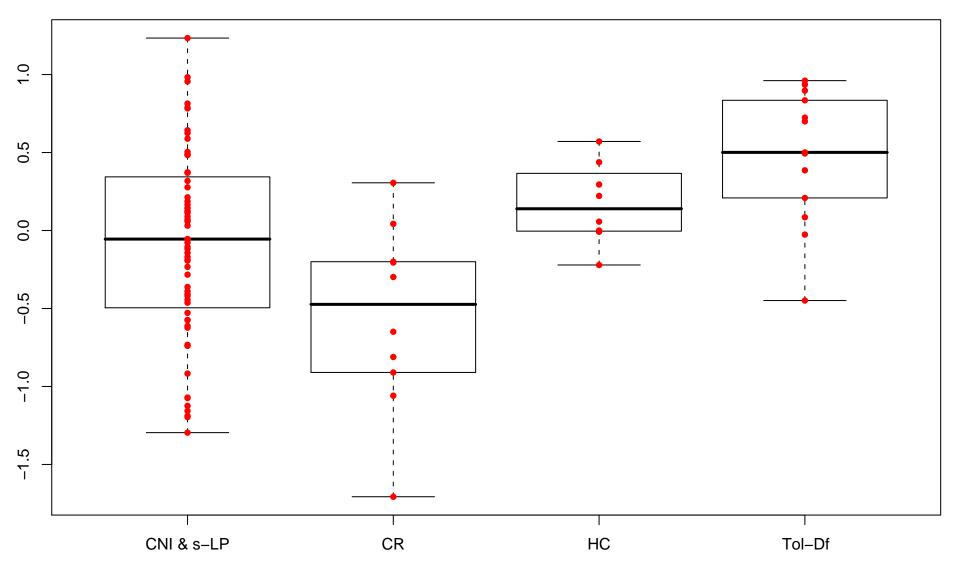
Rank 169 : DTX1 0.0004395



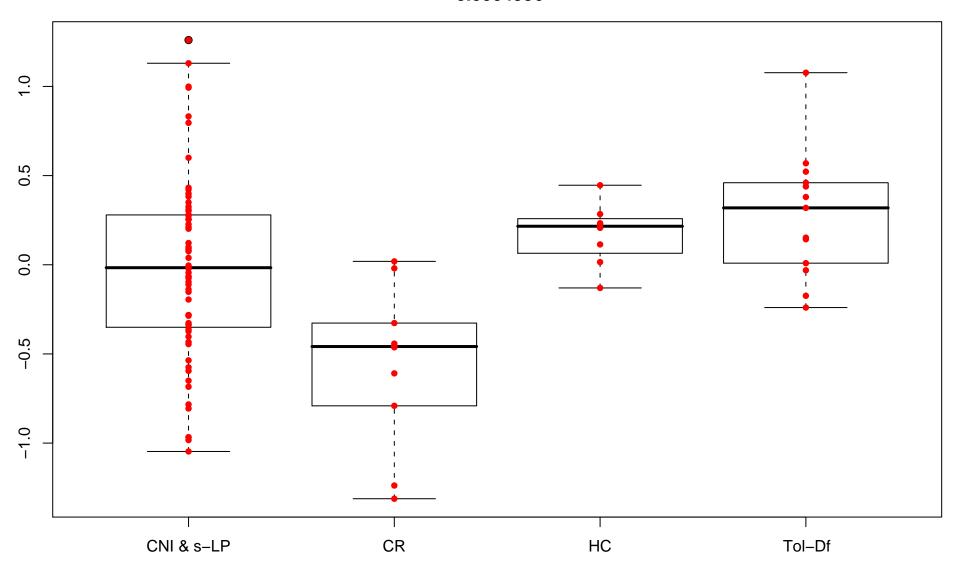
Rank 170 : TRIM4 0.0004396



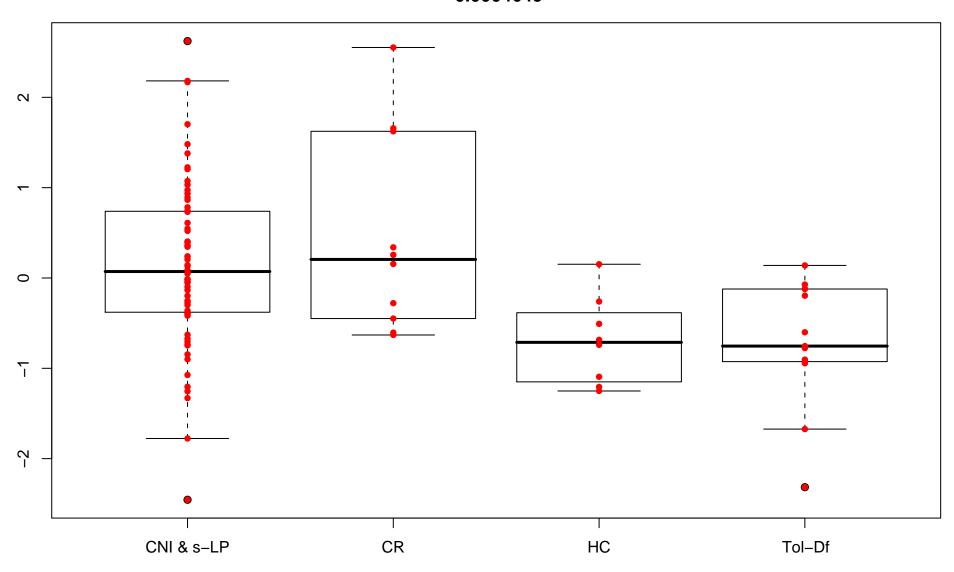
Rank 171: TMEM106B 0.0004506



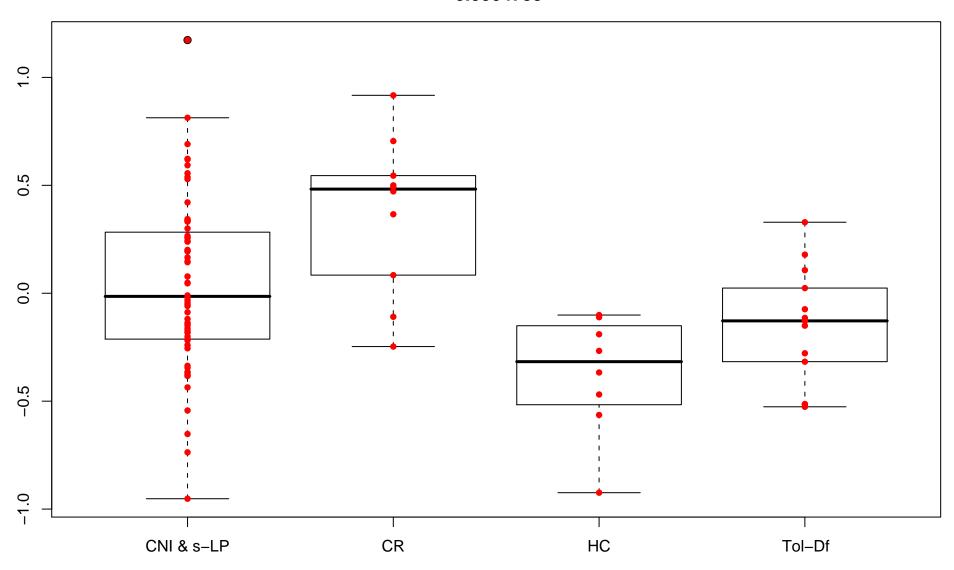
Rank 172 : CCNG1 0.0004536



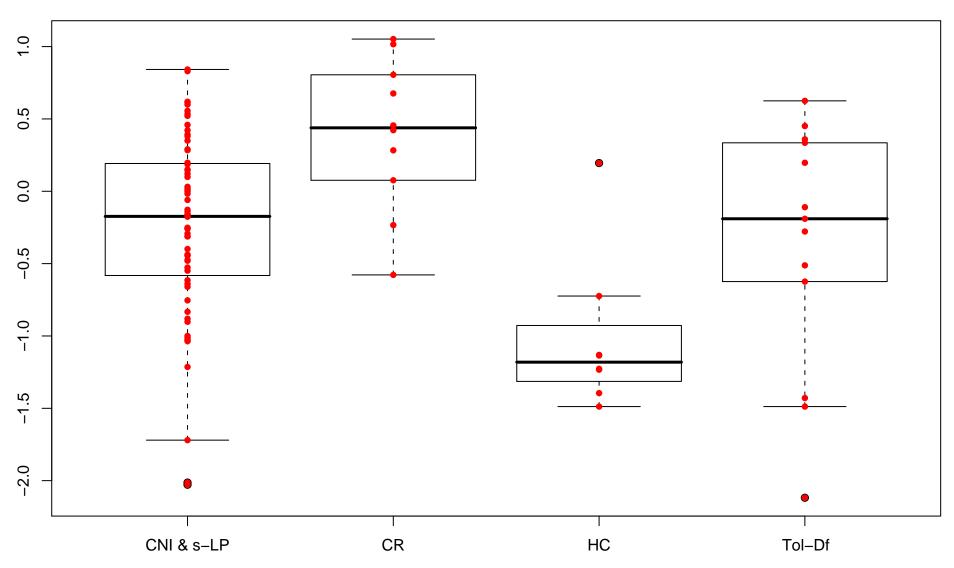
Rank 173 : HP 0.0004649



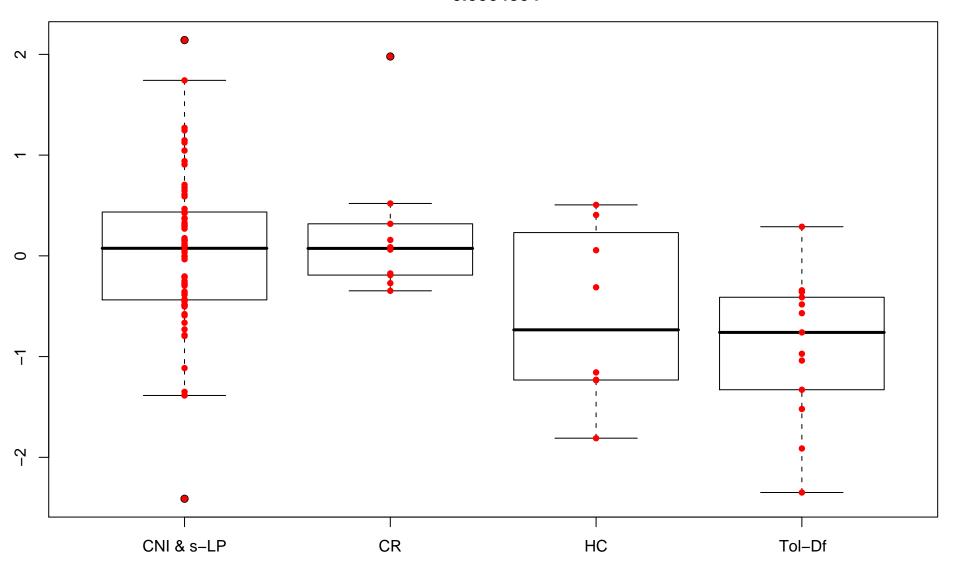
Rank 174 : TXNDC13 0.0004759



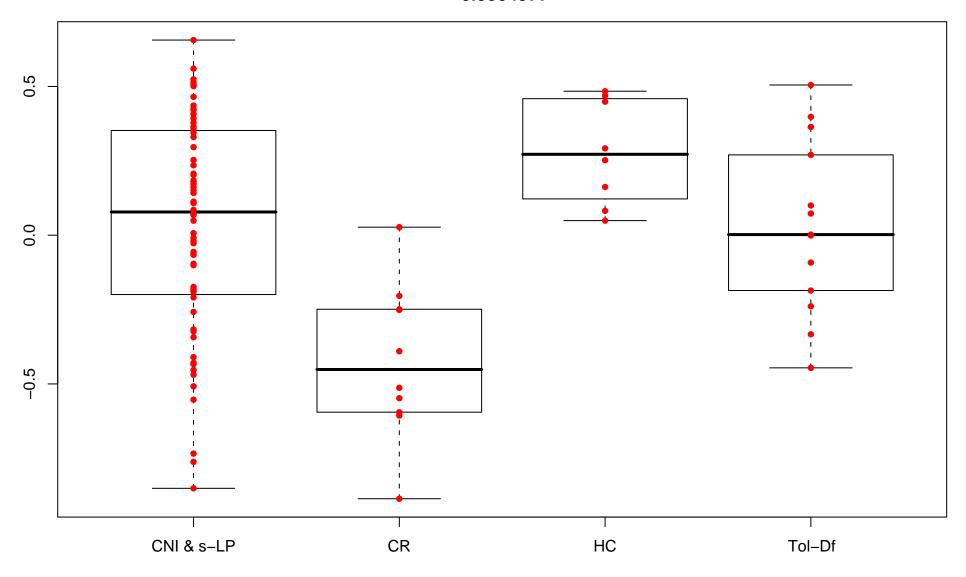
Rank 175 : OR2M1P;OR2M2 0.0004778



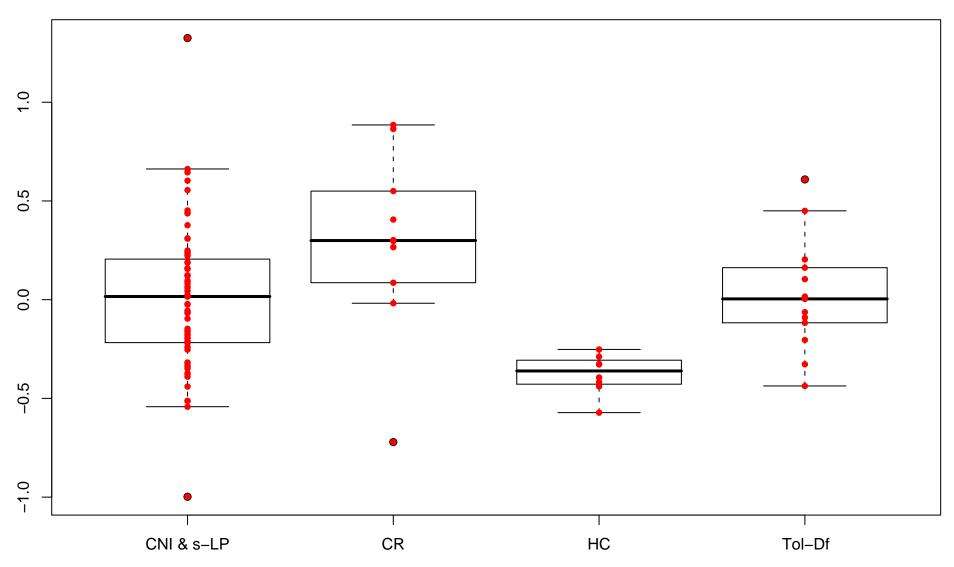
Rank 176 : FCAR 0.0004804



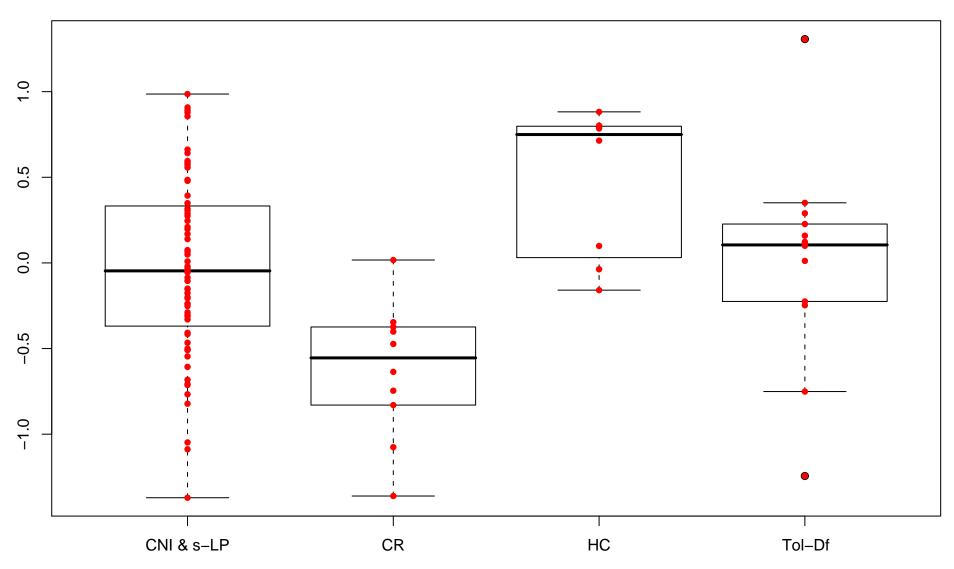
Rank 177 : BTG2 0.0004977



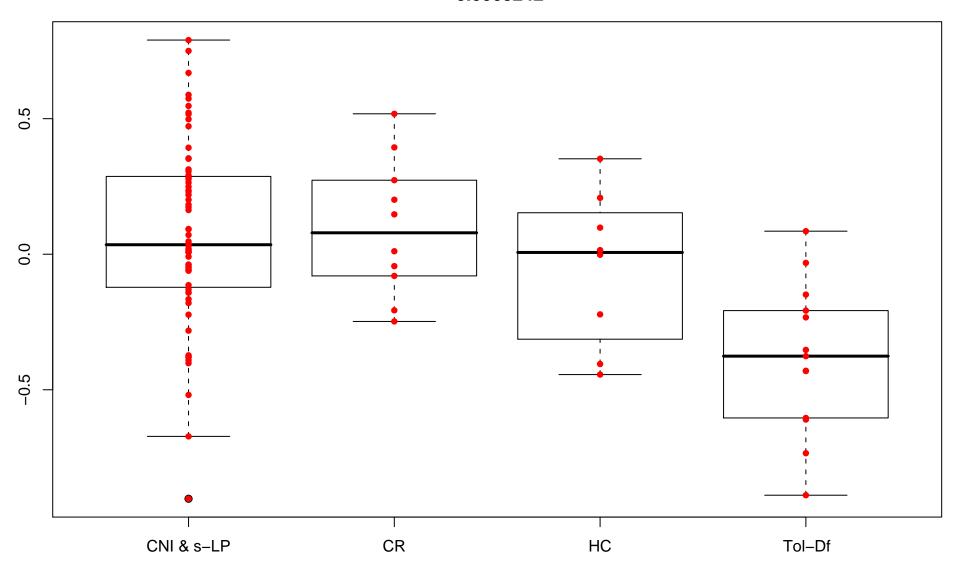
Rank 178 : VCPIP1 0.0005103



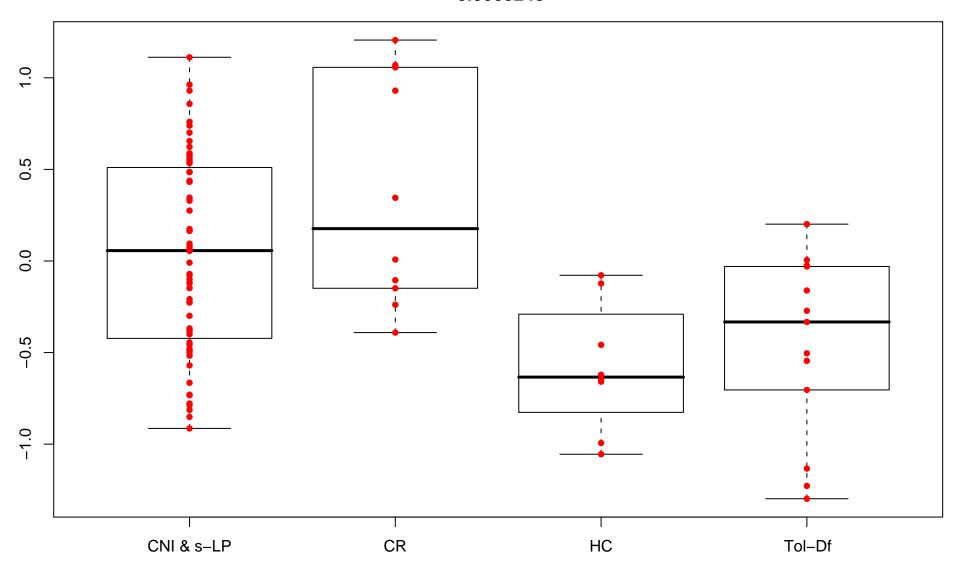
Rank 179 : SATB1 0.0005111



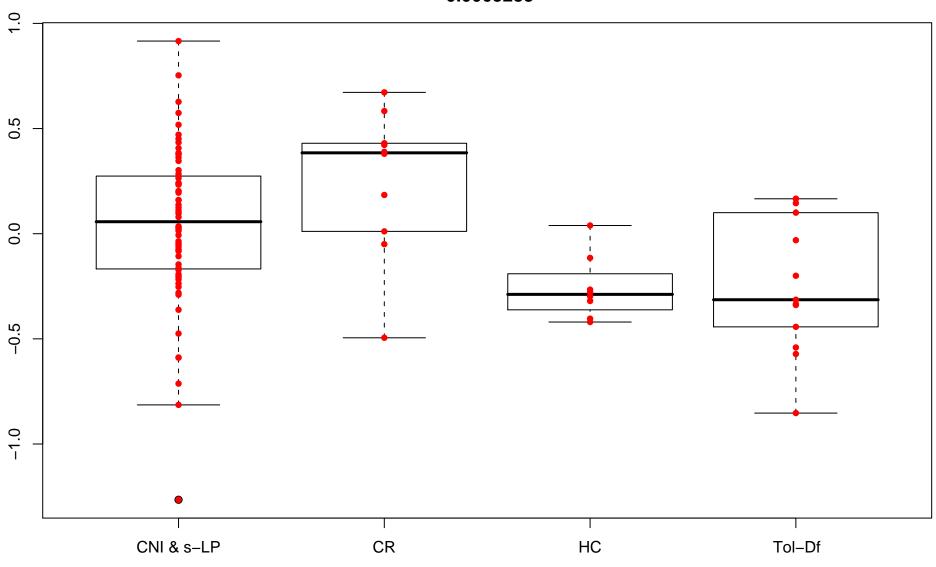
Rank 180 : PAK1 0.0005242



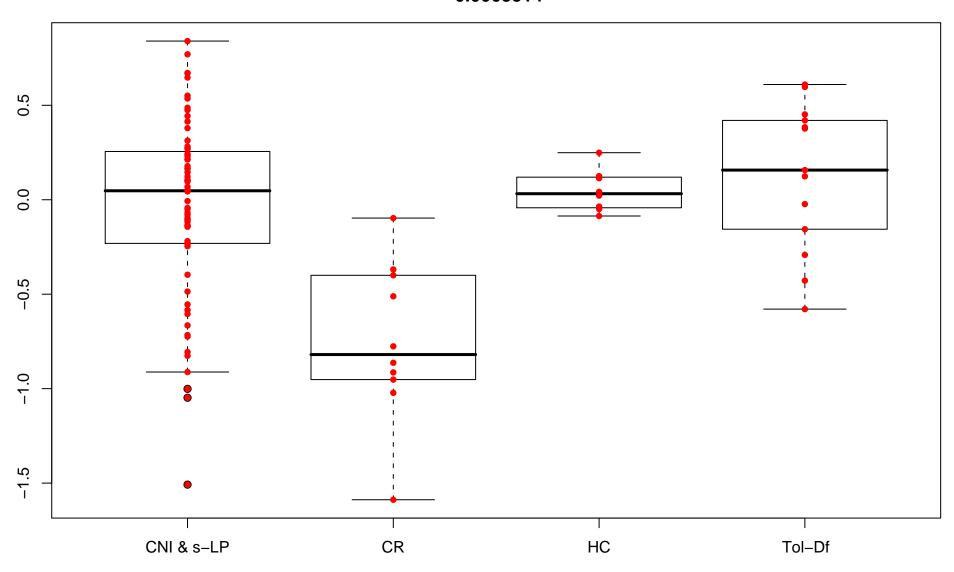
Rank 181 : PDLIM7 0.0005243



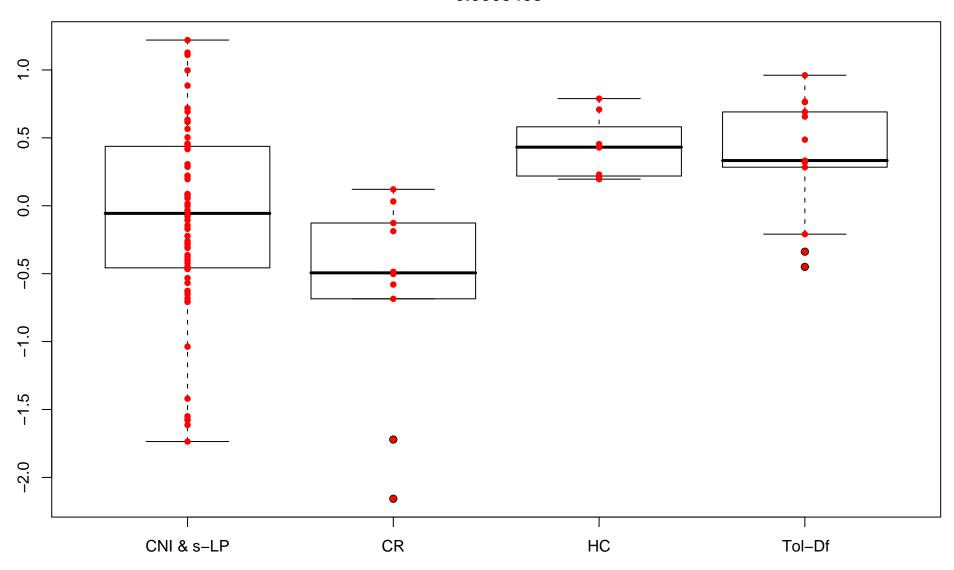
Rank 182 : NOTCH2 0.0005283



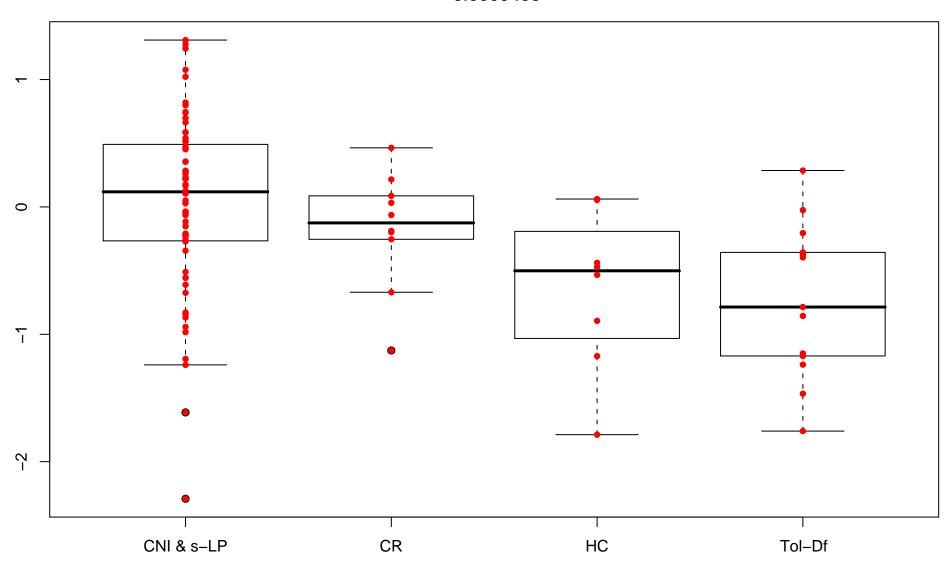
Rank 183 : A\_24\_P706752 0.0005314



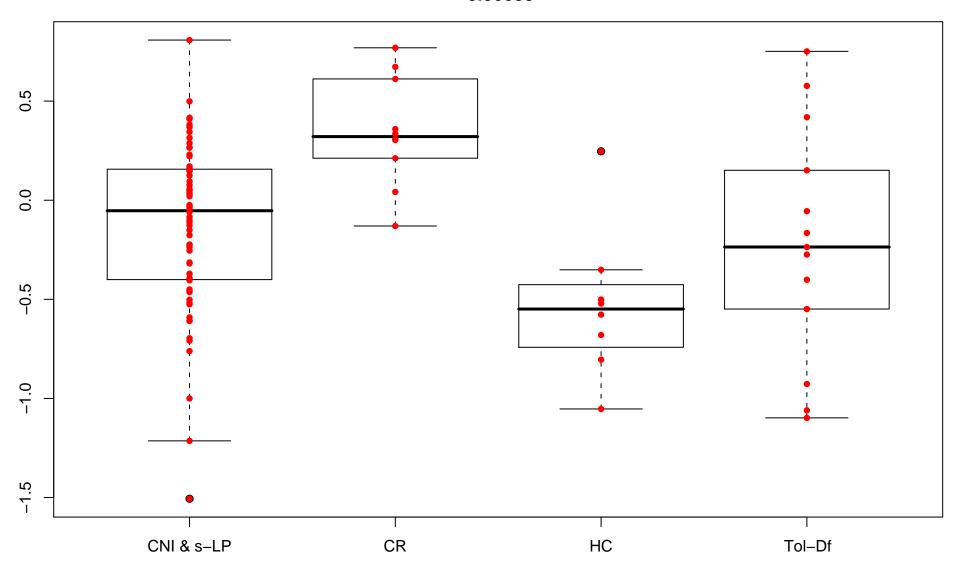
Rank 184 : IL23A 0.0005405



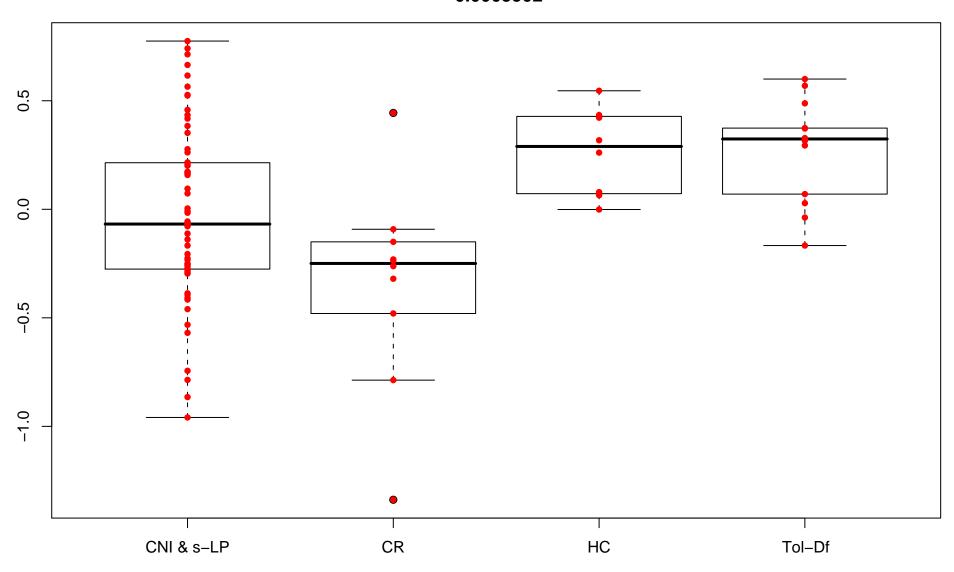
Rank 185 : DDEF1 0.0005408



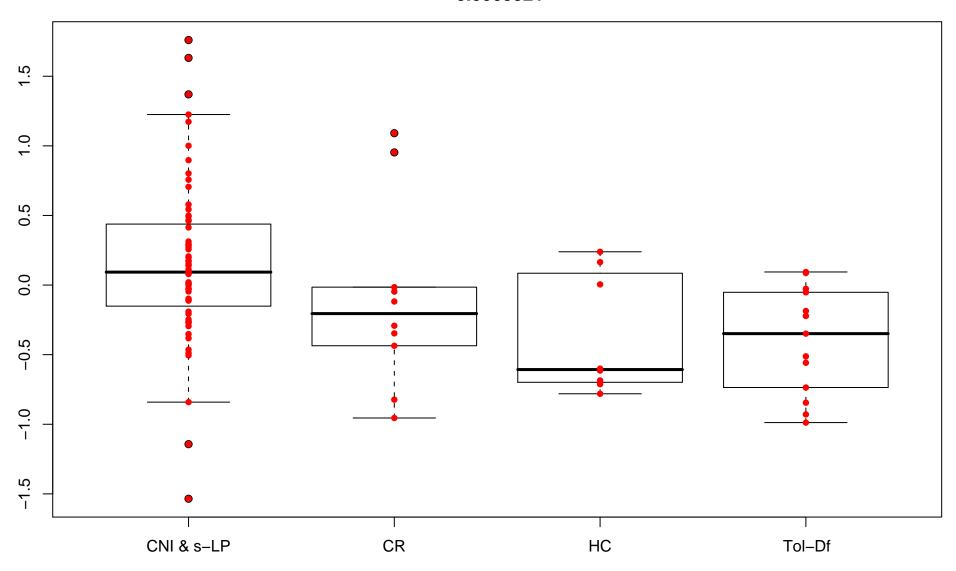
Rank 186 : GPRC5B 0.00055



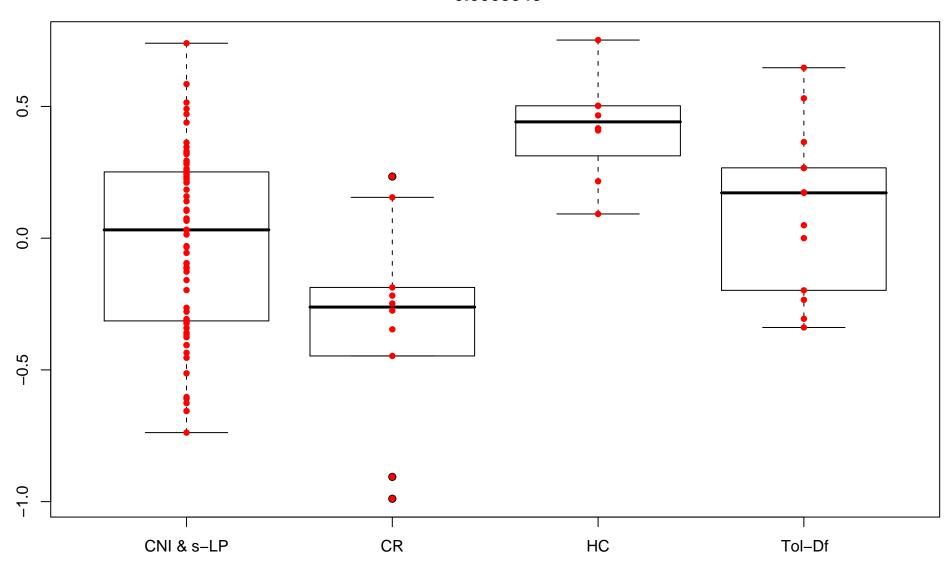
Rank 187 : XBP1 0.0005502



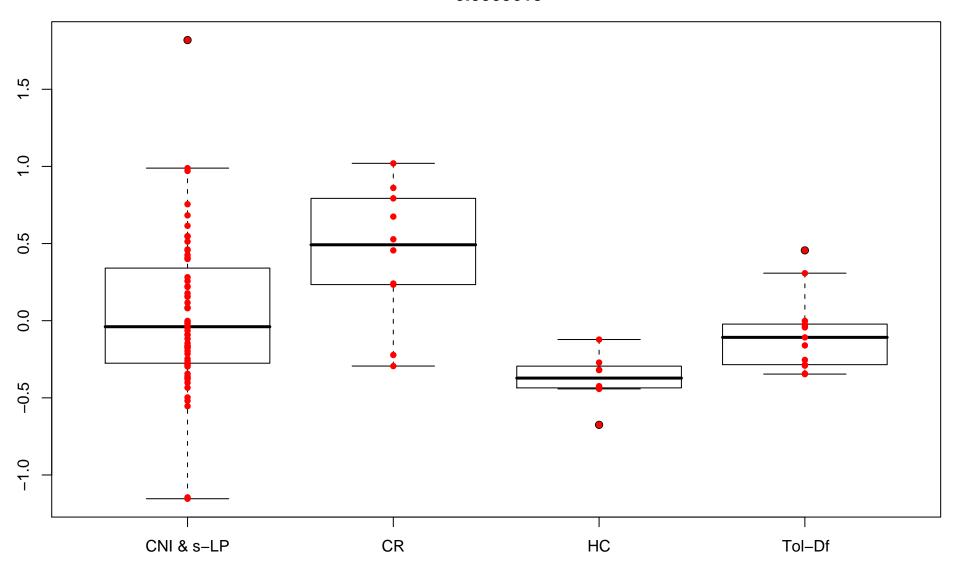
Rank 188 : SOCS3 0.0005521



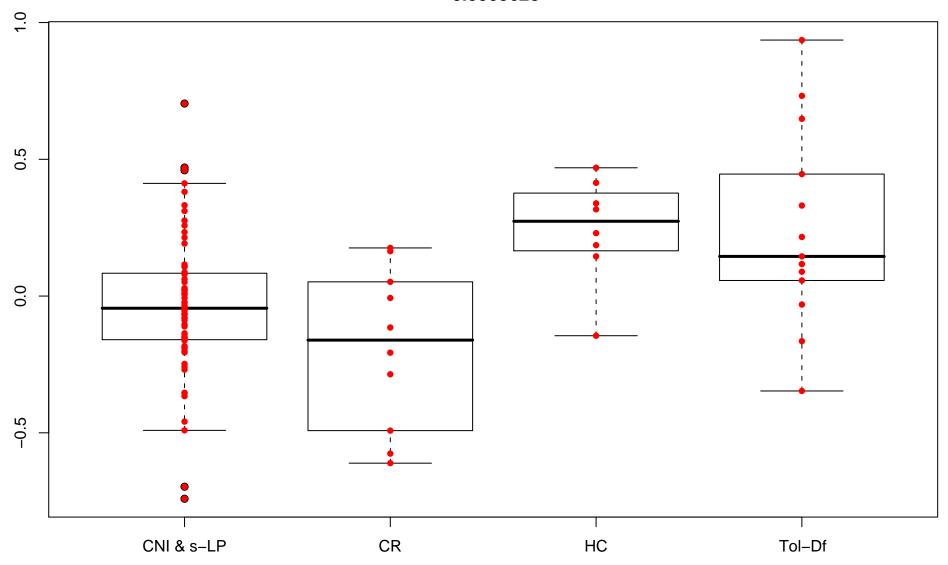
Rank 189 : SFRS10 0.0005548



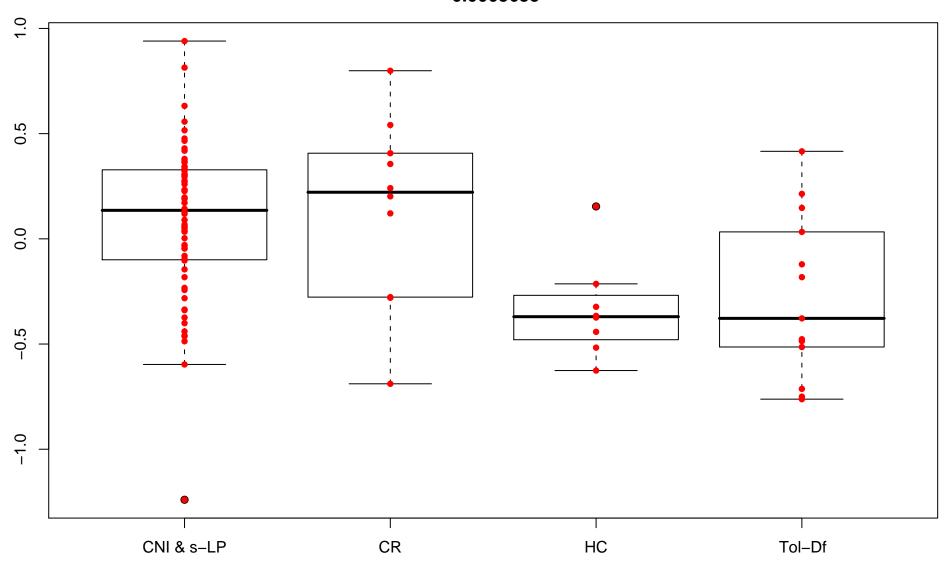
Rank 190 : TNFSF10 0.0005615



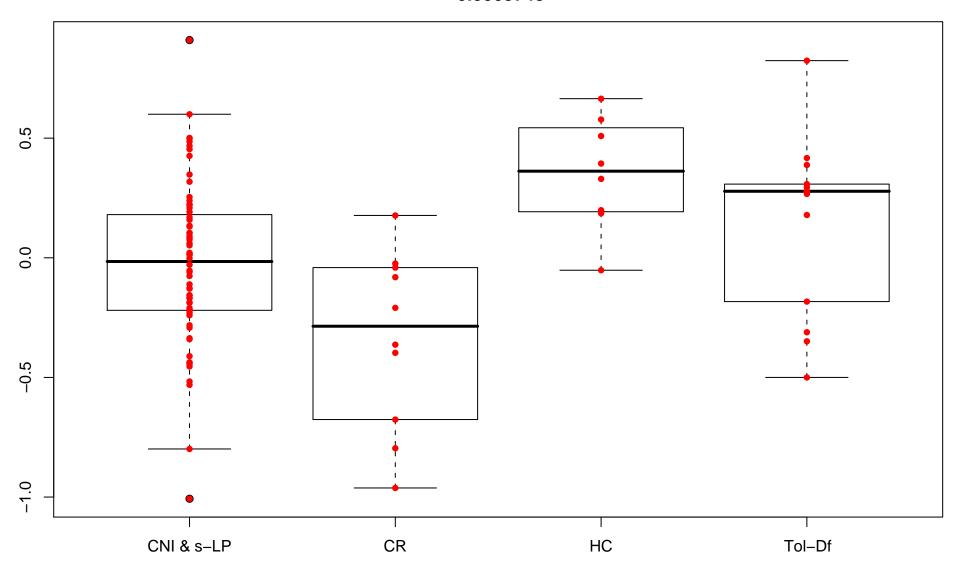
Rank 191 : B3GALT6 0.0005628



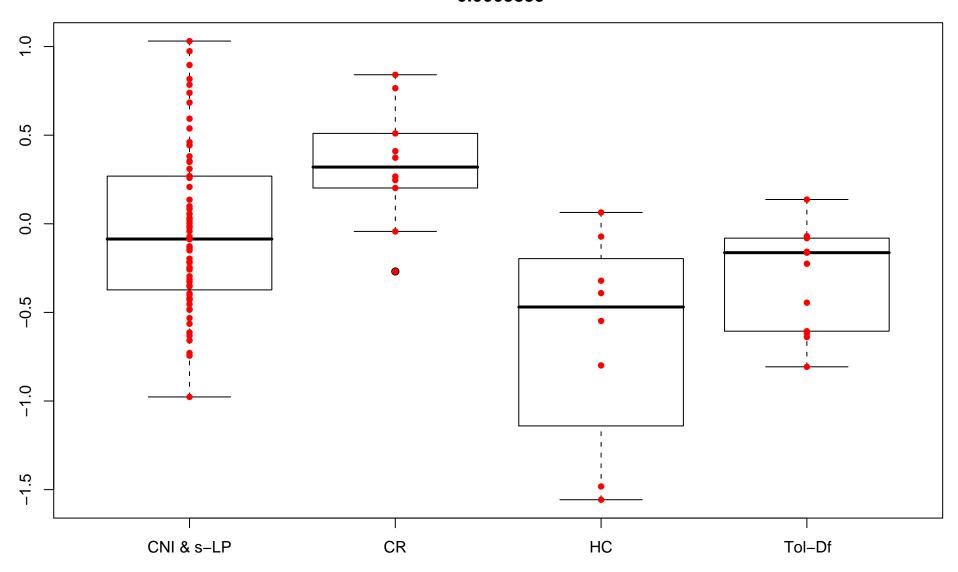
Rank 192 : AQP9 0.0005635



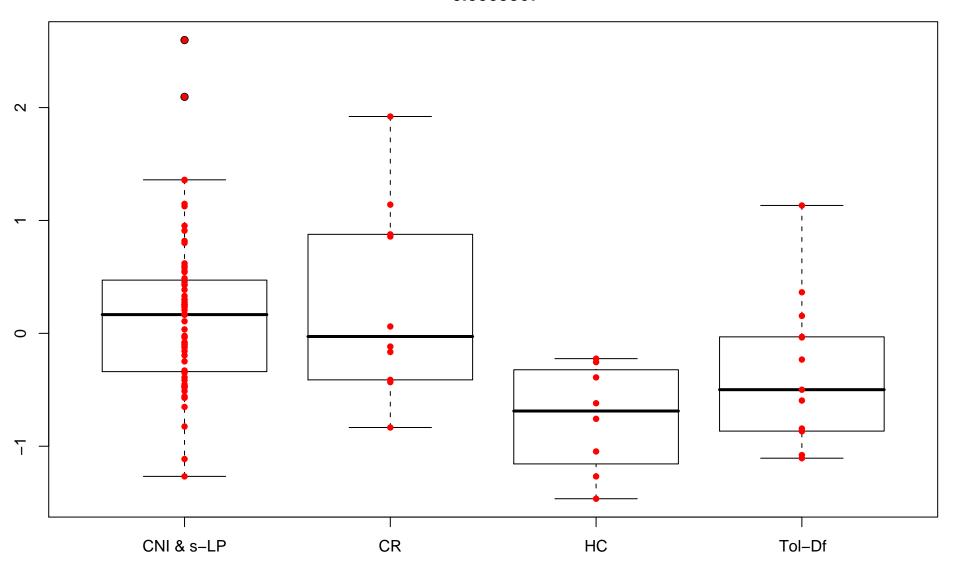
Rank 193 : ZNF655 0.0005743



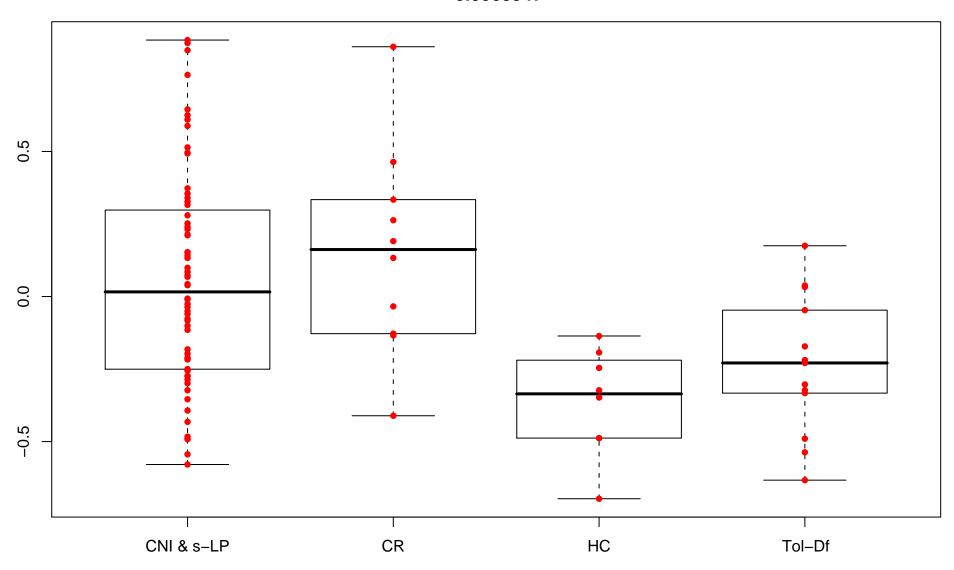
Rank 194 : UPB1 0.0005839



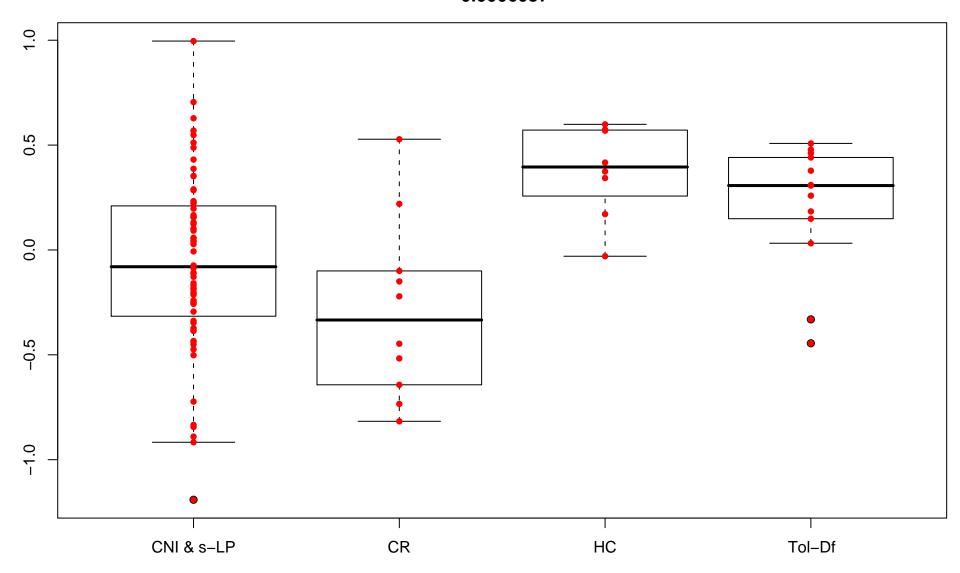
Rank 195 : RNASE2 0.0005867



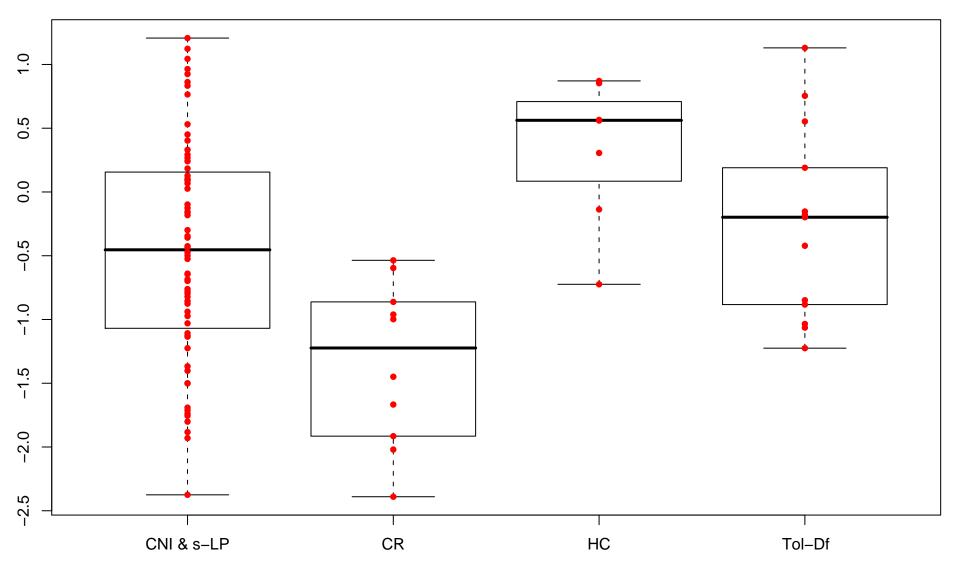
Rank 196 : MAP2K6 0.0005947



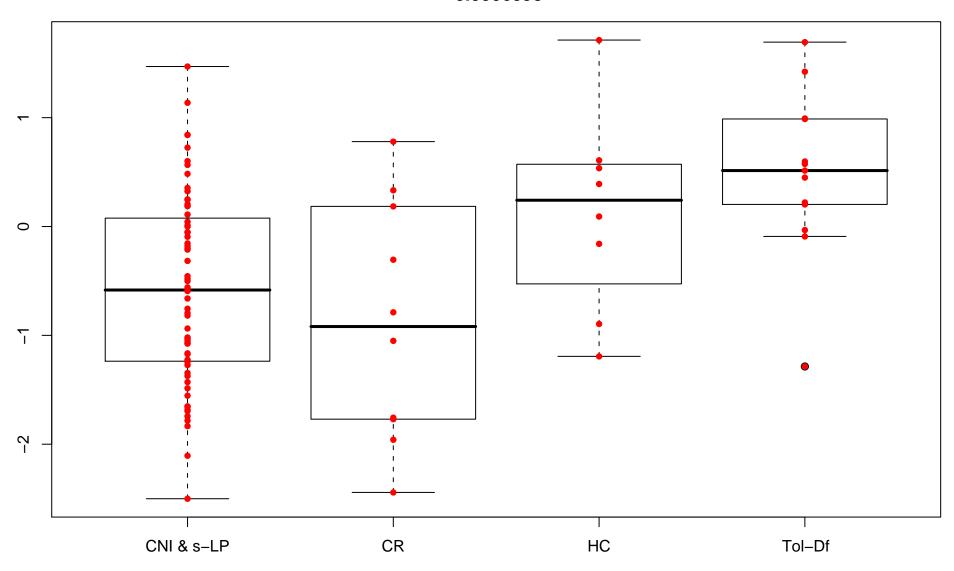
Rank 197 : CHST2 0.0006037



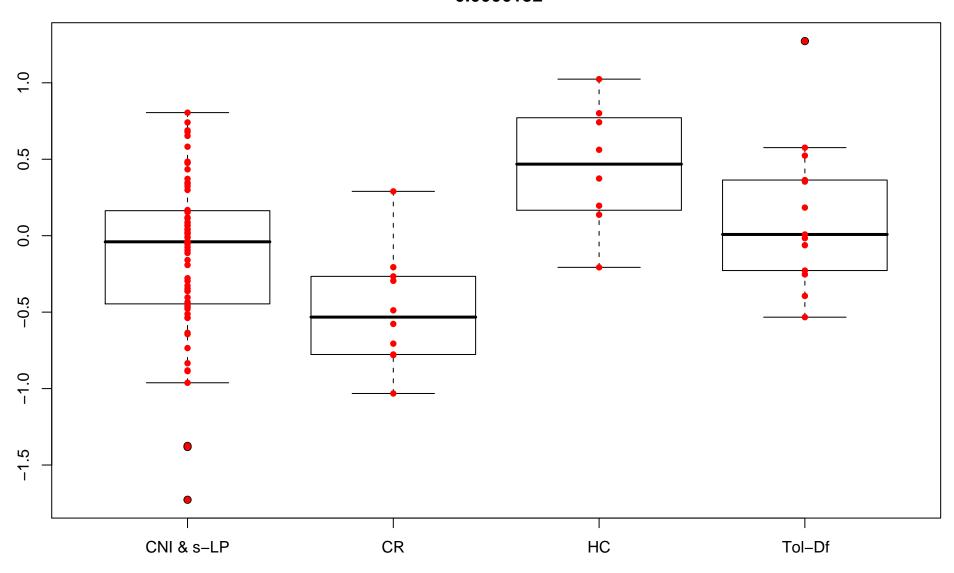
Rank 198: LYRM7 0.0006079



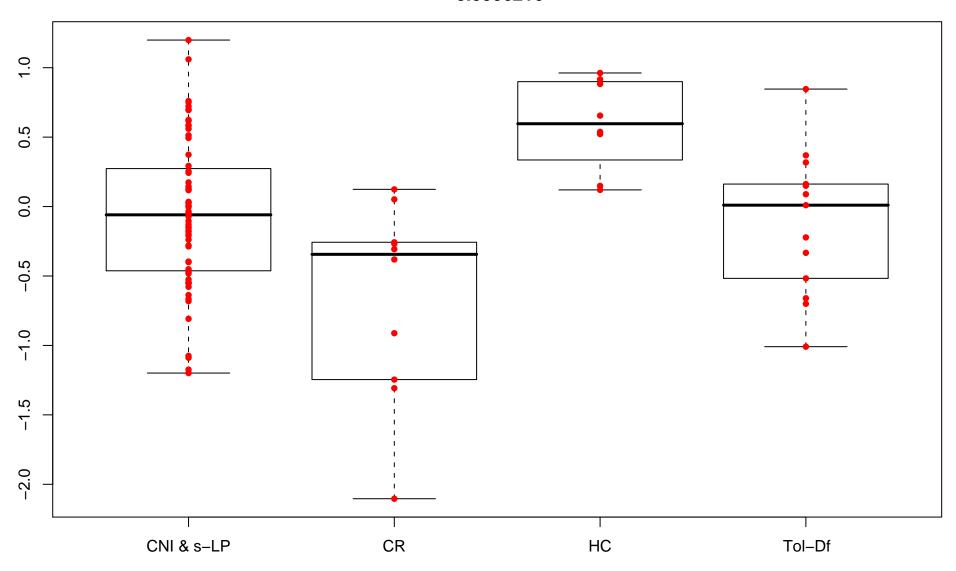
Rank 199 : AK124263 0.0006098



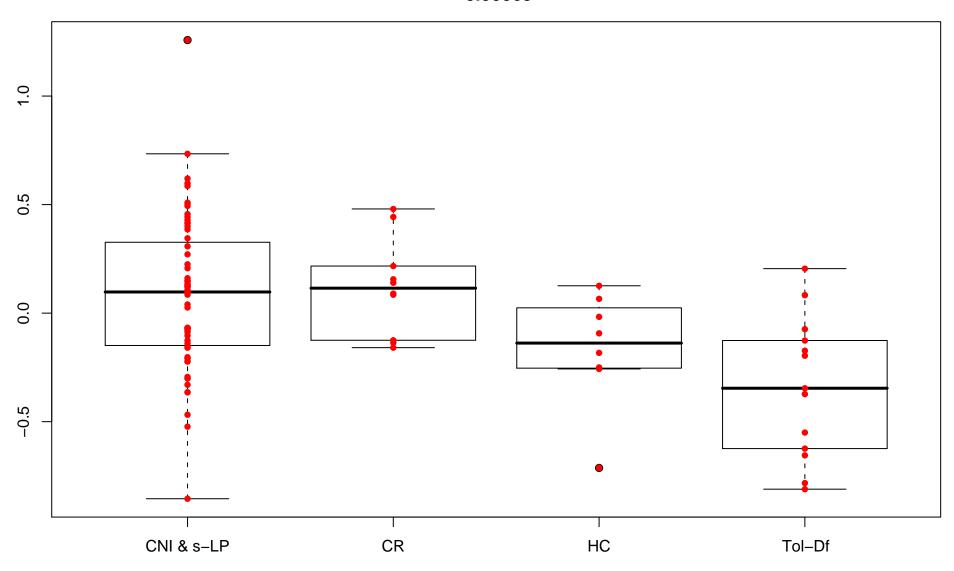
Rank 200 : MYT1;PCMTD2 0.0006132



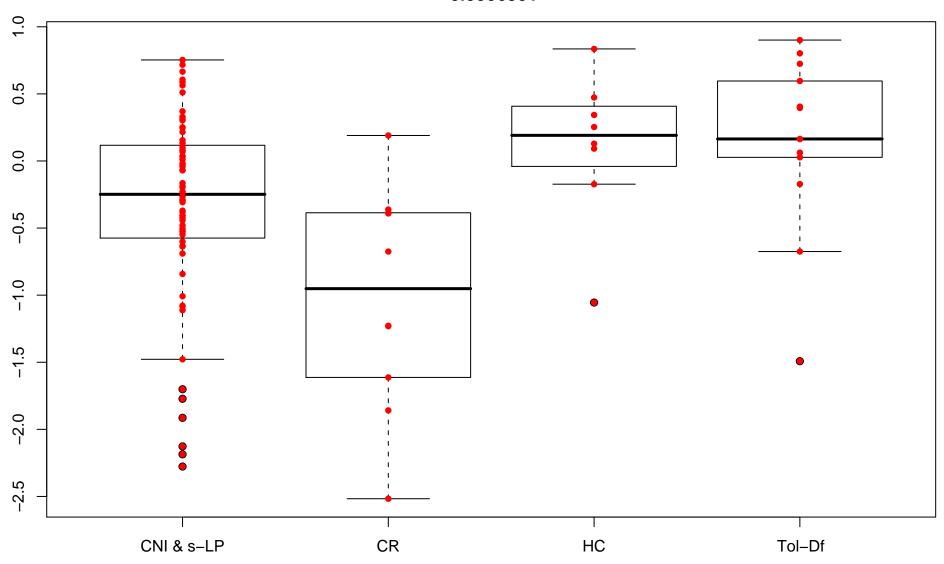
Rank 201 : CD96 0.0006216



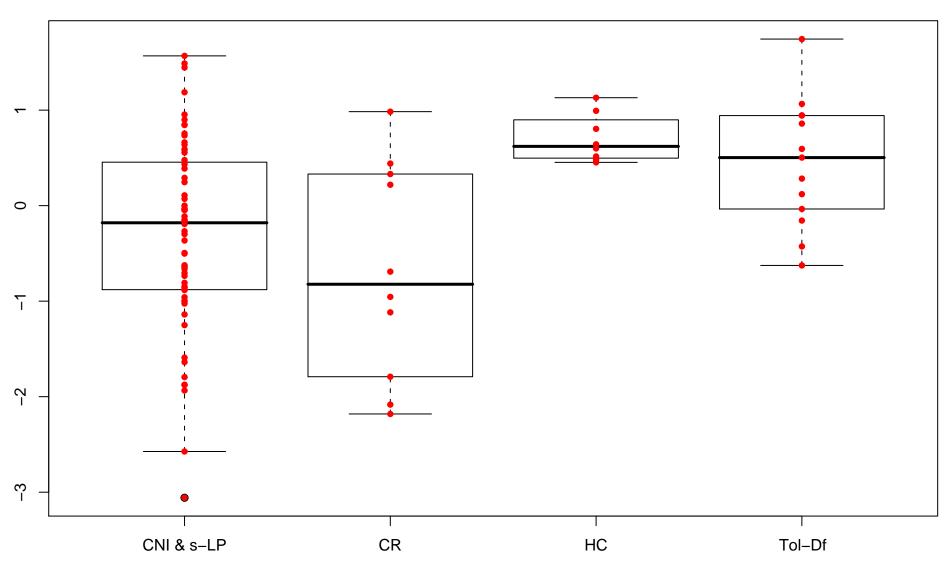
Rank 202 : IRF2 0.00063



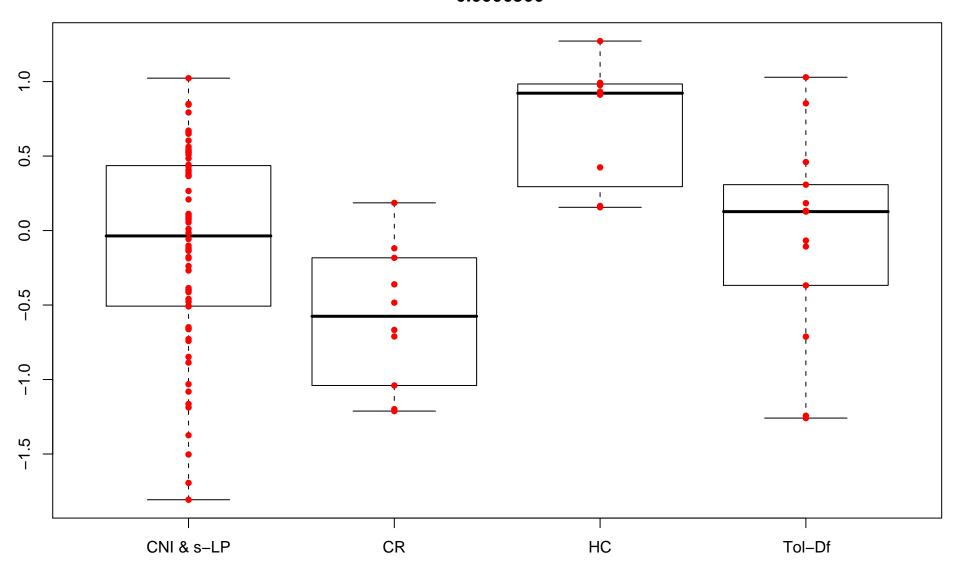
Rank 203 : PCGF6 0.0006301



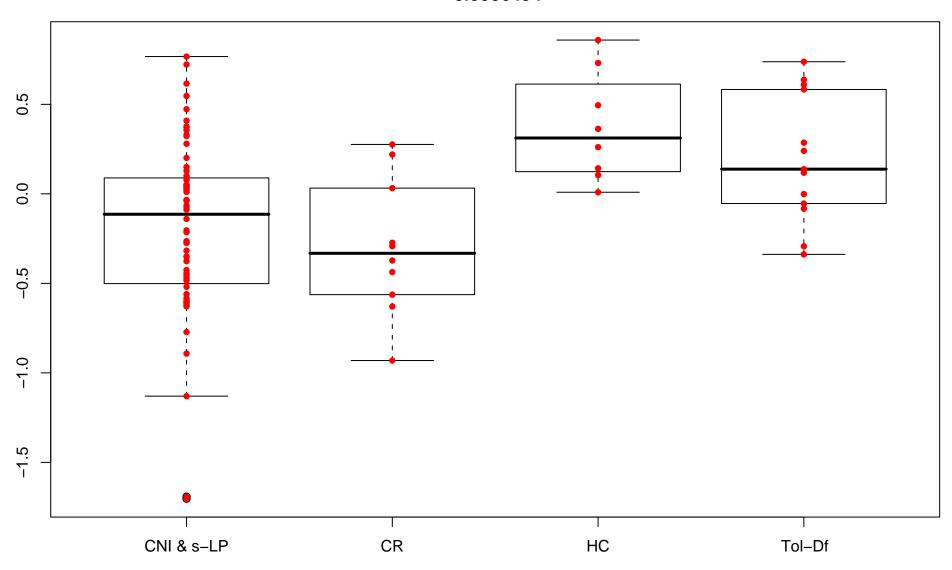
Rank 204 : IGKV3-20 0.0006323



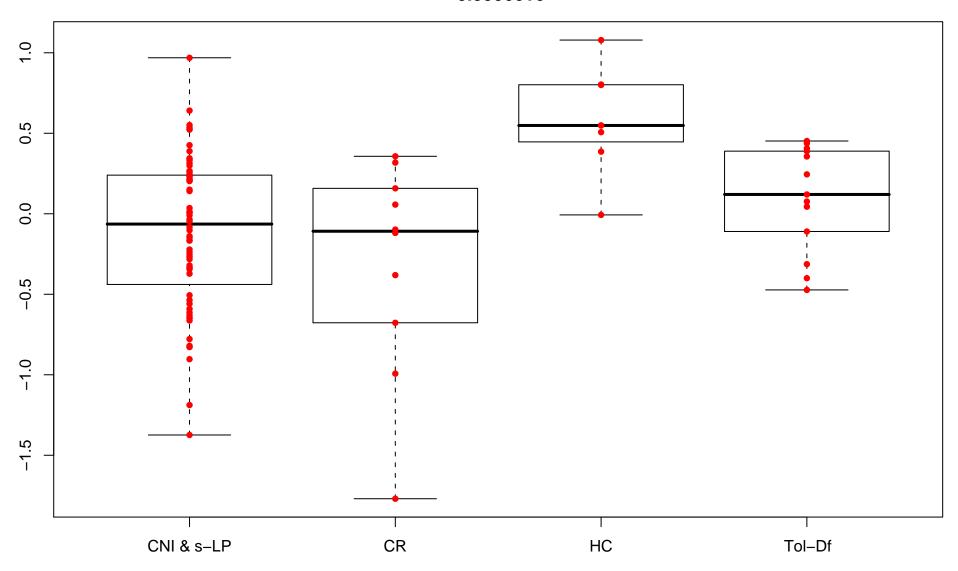
Rank 205 : CARD11 0.0006366



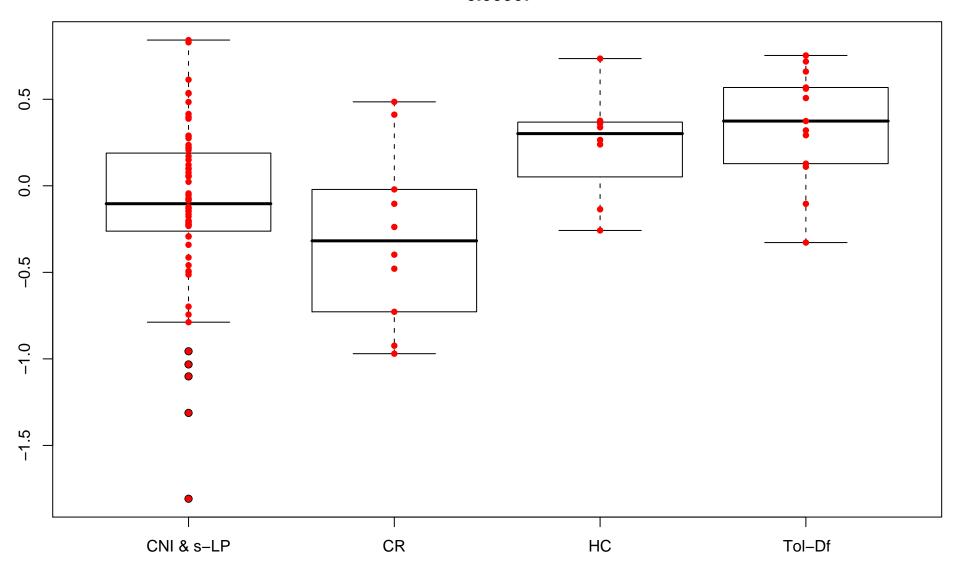
Rank 206 : IFT80 0.0006494



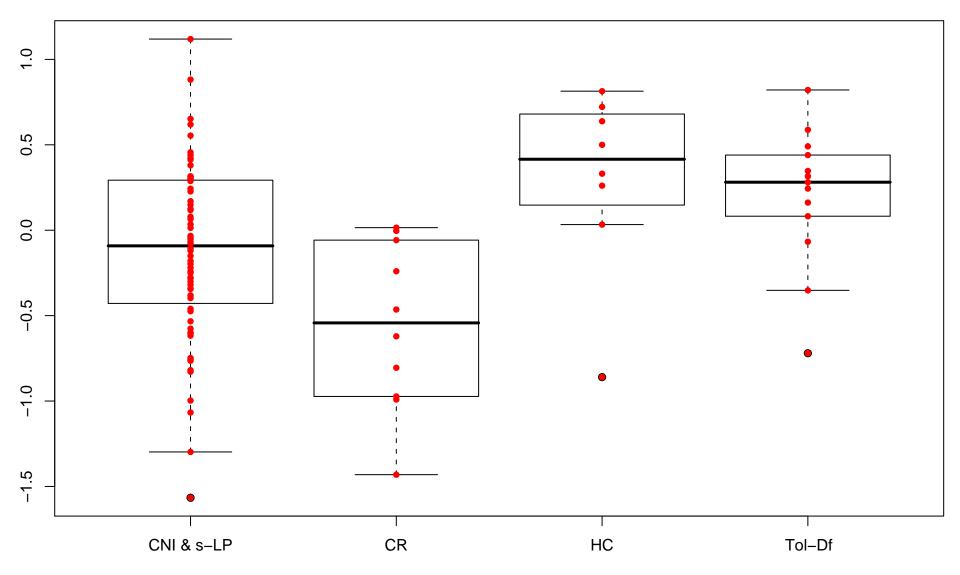
Rank 207 : SLAMF1 0.0006616



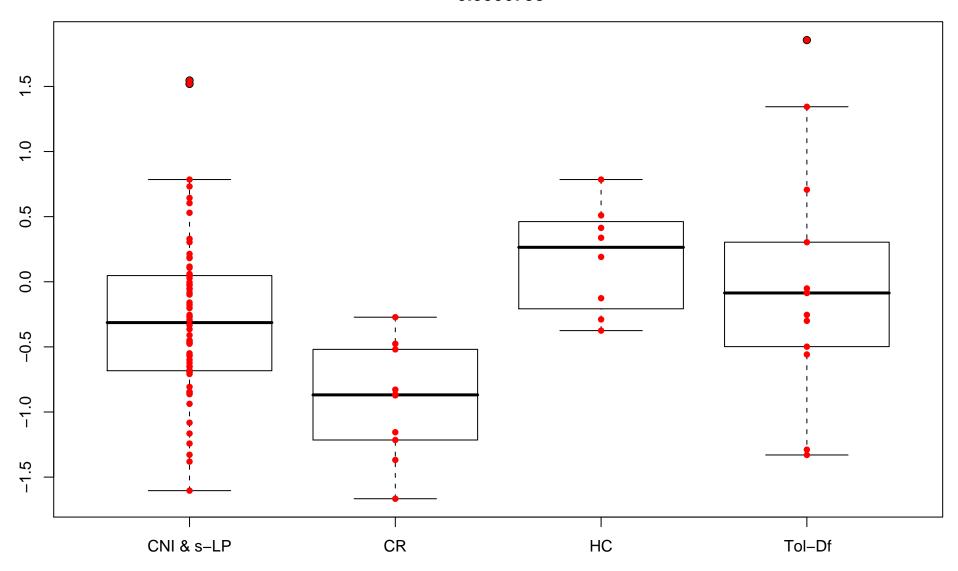
Rank 208 : SIP1 0.00067



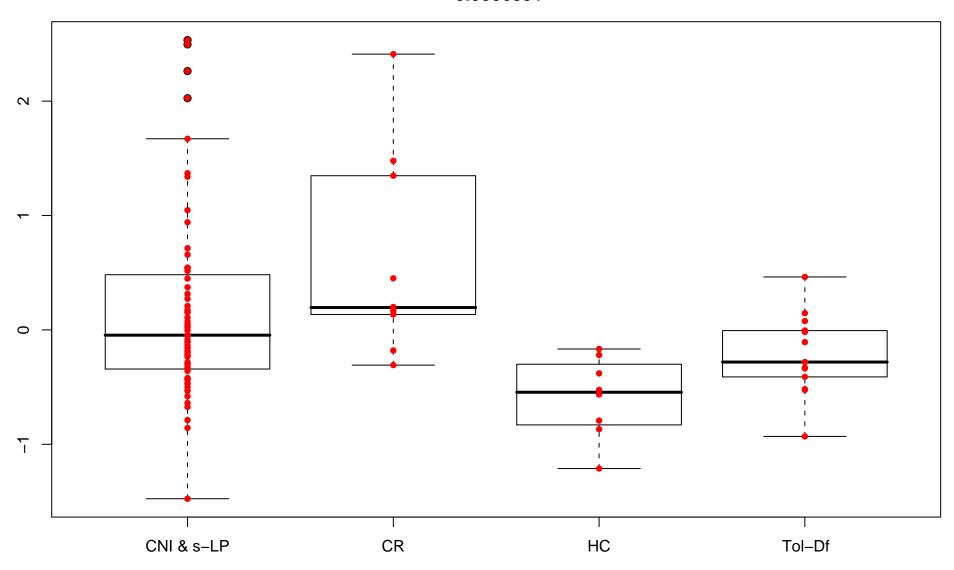
Rank 209 : FAIM 0.0006737



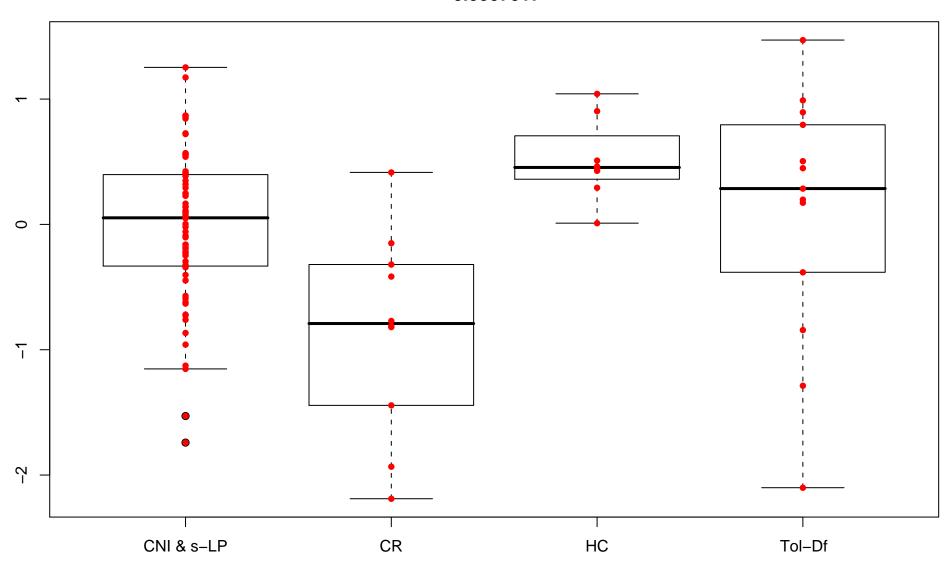
Rank 210 : NEK1 0.0006753



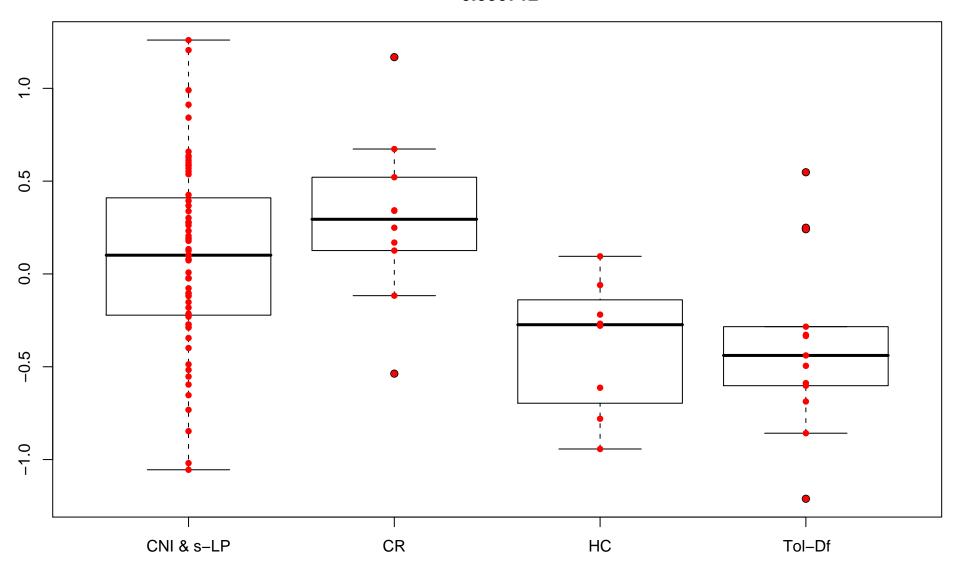
Rank 211 : IL1R2 0.0006851



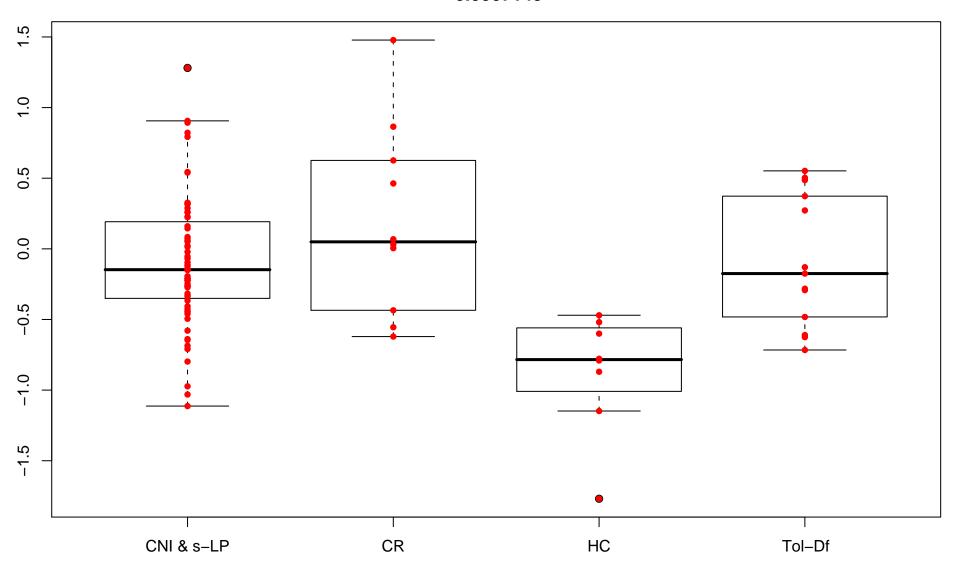
Rank 212 : HOXB2 0.0007017



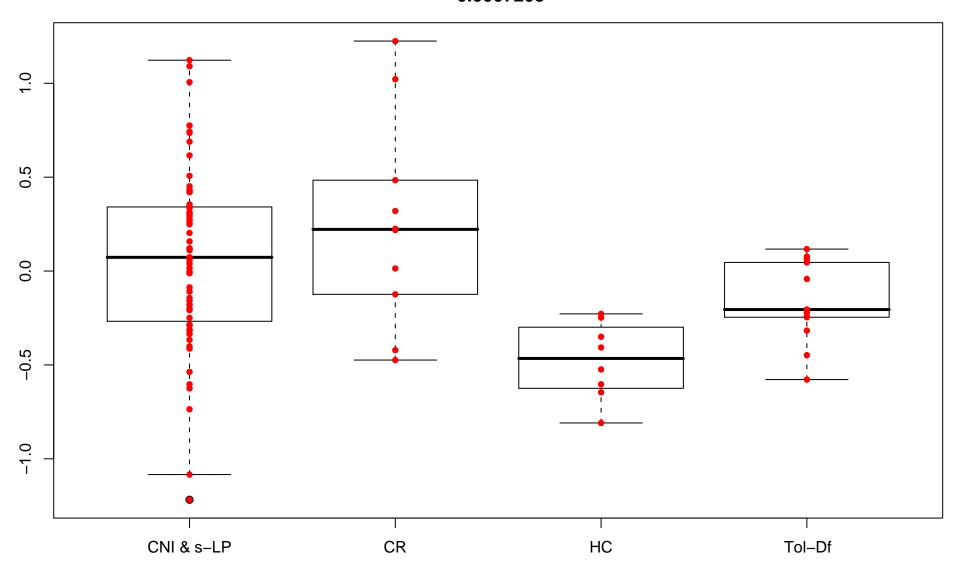
Rank 213 : VCAN 0.000712



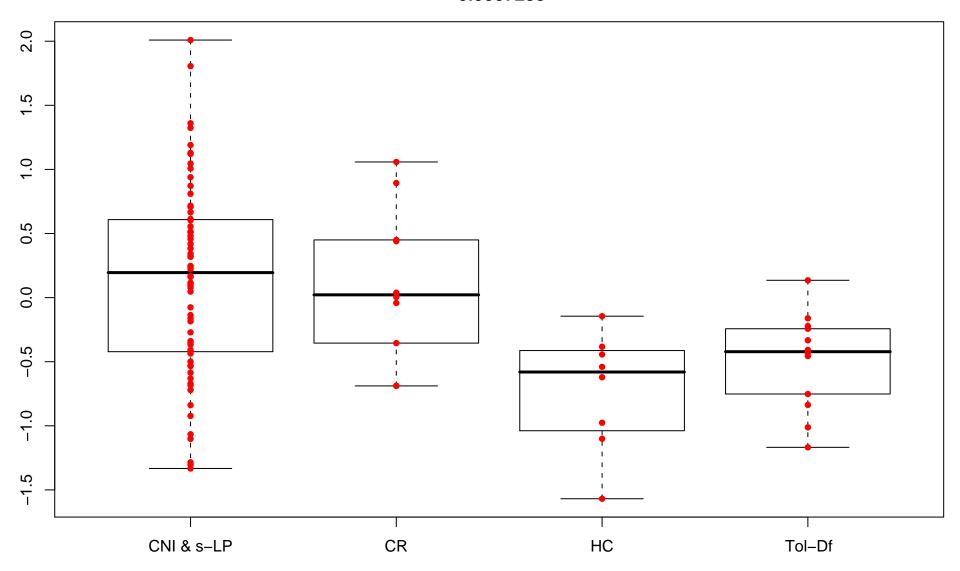
Rank 214 : FLT3 0.0007149



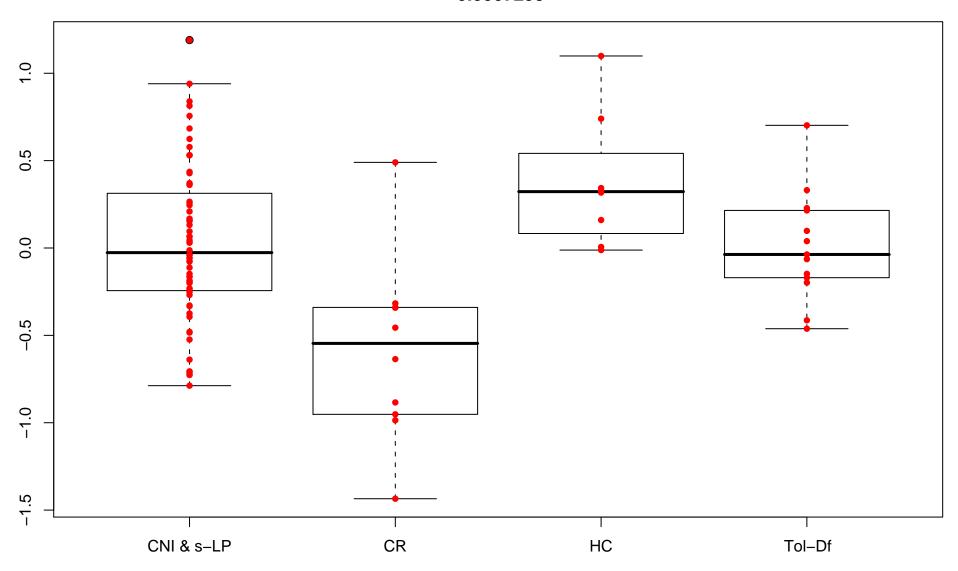
Rank 215 : CD55 0.0007203



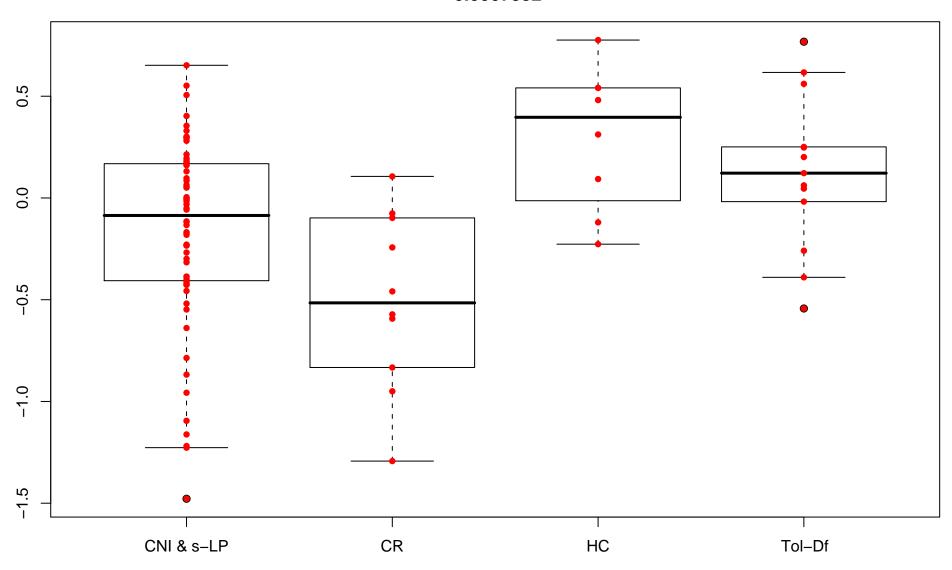
Rank 216 : SLC26A8 0.0007239



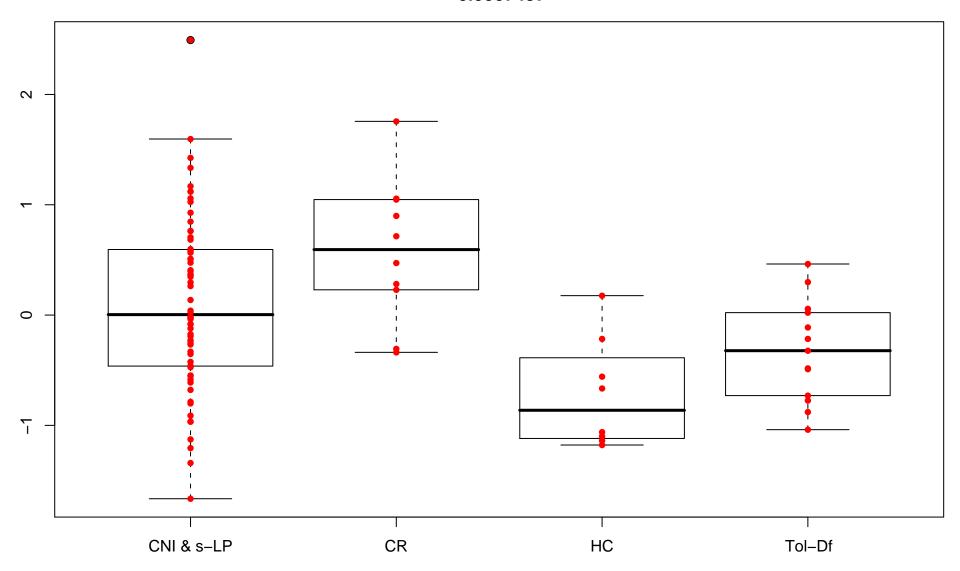
Rank 217 : PDLIM1 0.0007299



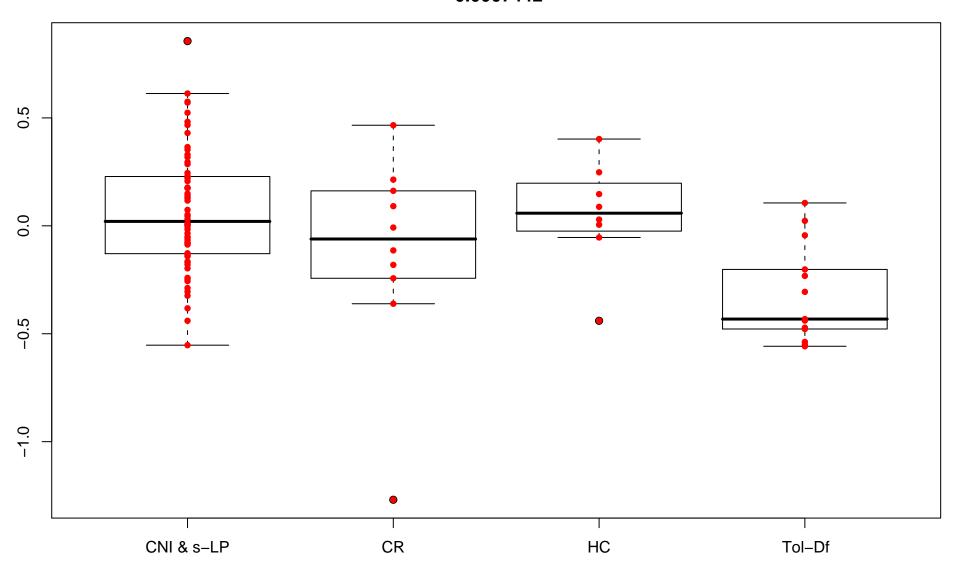
Rank 218 : ZMYM1 0.0007352



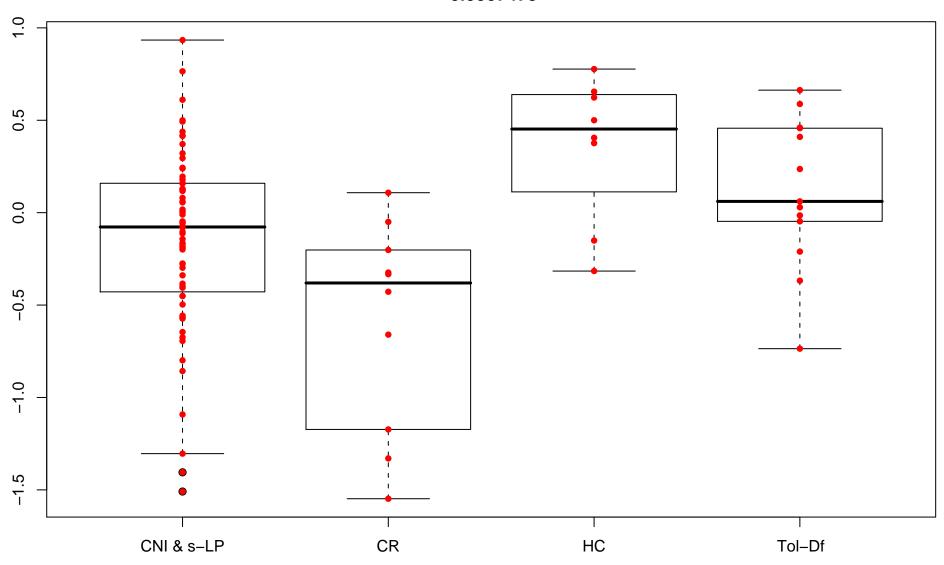
Rank 219 : FCGR1A 0.0007437



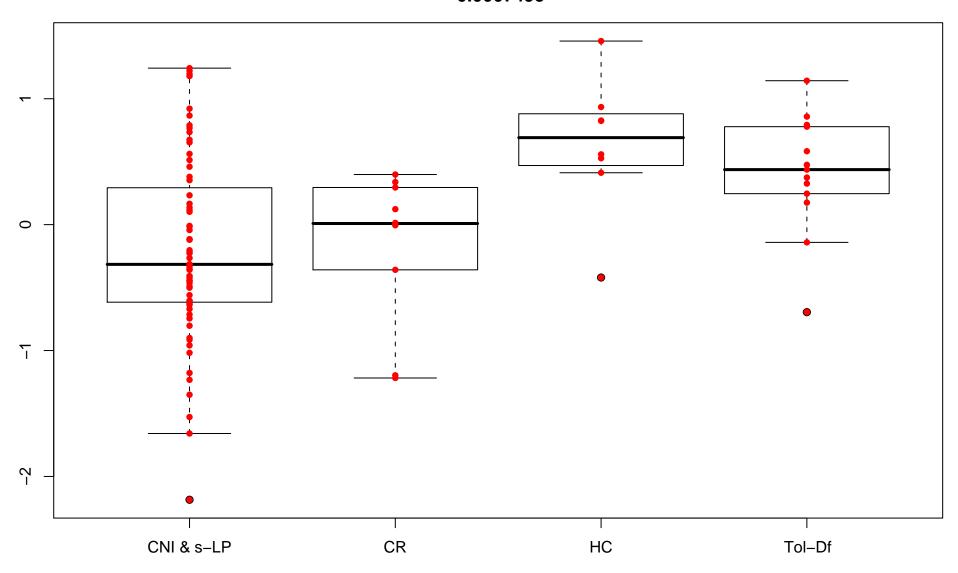
Rank 220 : LGALS8 0.0007442



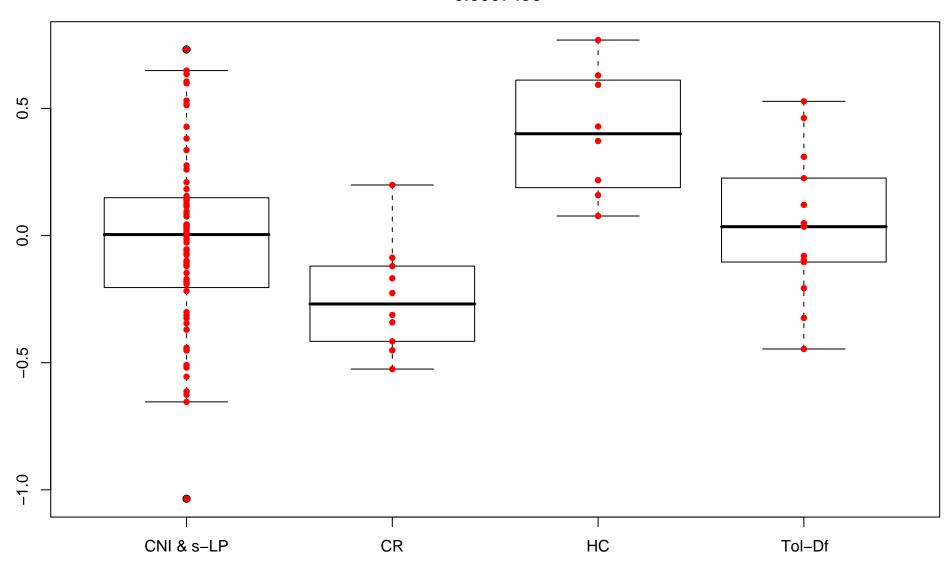
Rank 221 : MRPS30 0.0007479



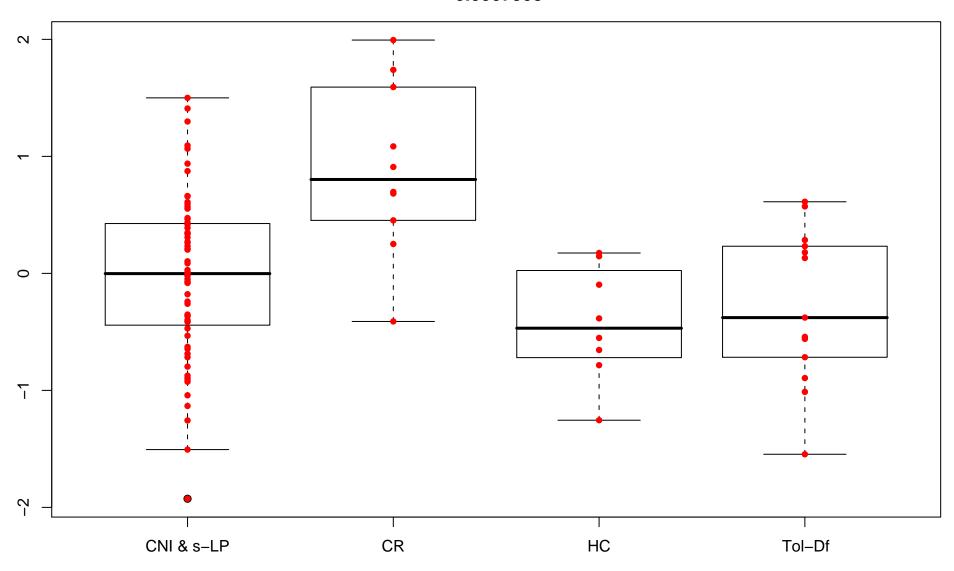
Rank 222 : CLIC3 0.0007495



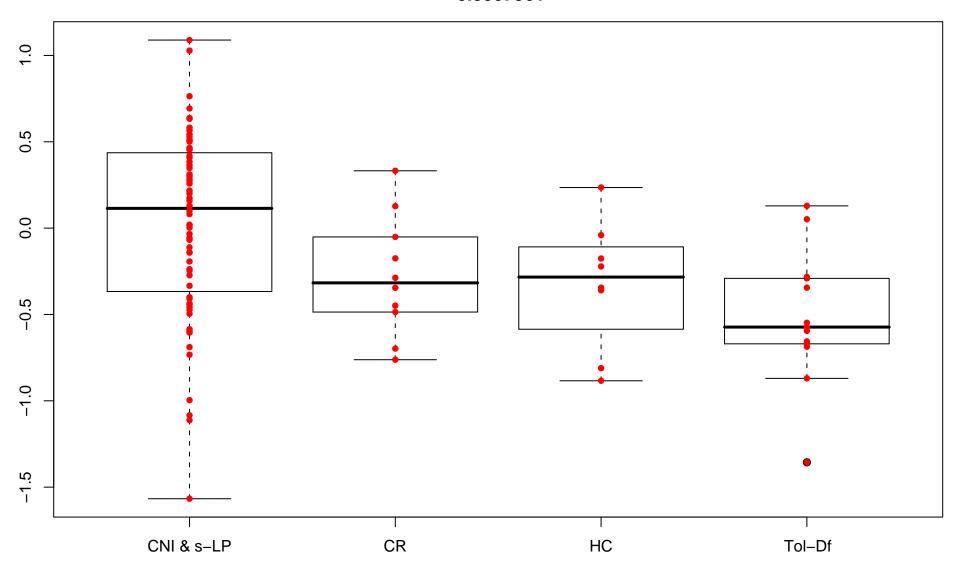
Rank 223 : BEX4 0.0007498



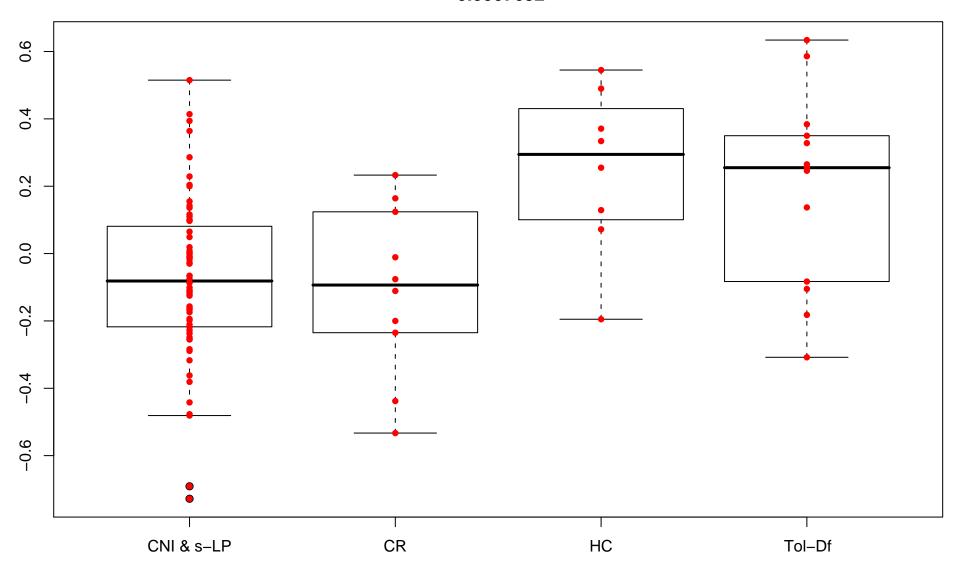
Rank 224 : SLC11A1 0.0007508



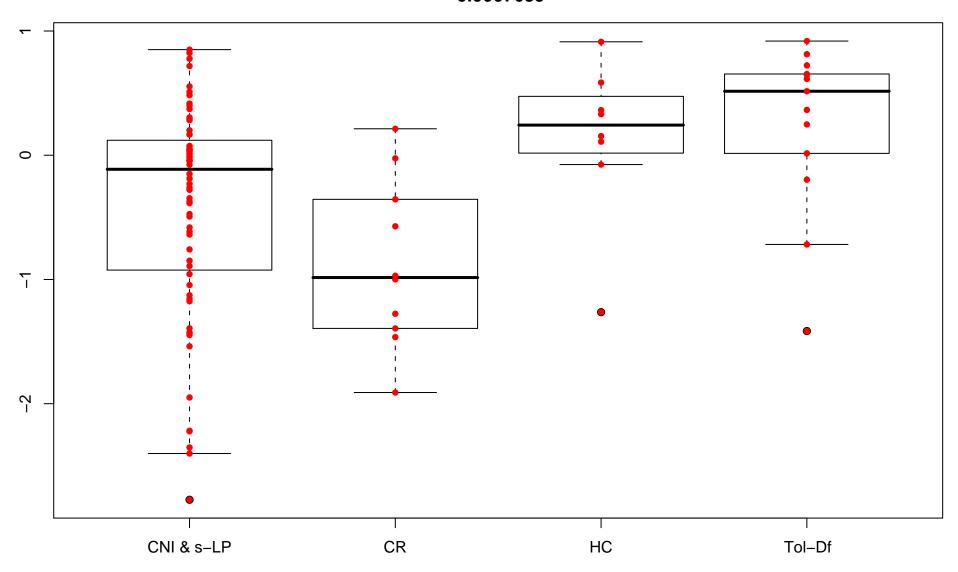
Rank 225 : BMP2K 0.0007561



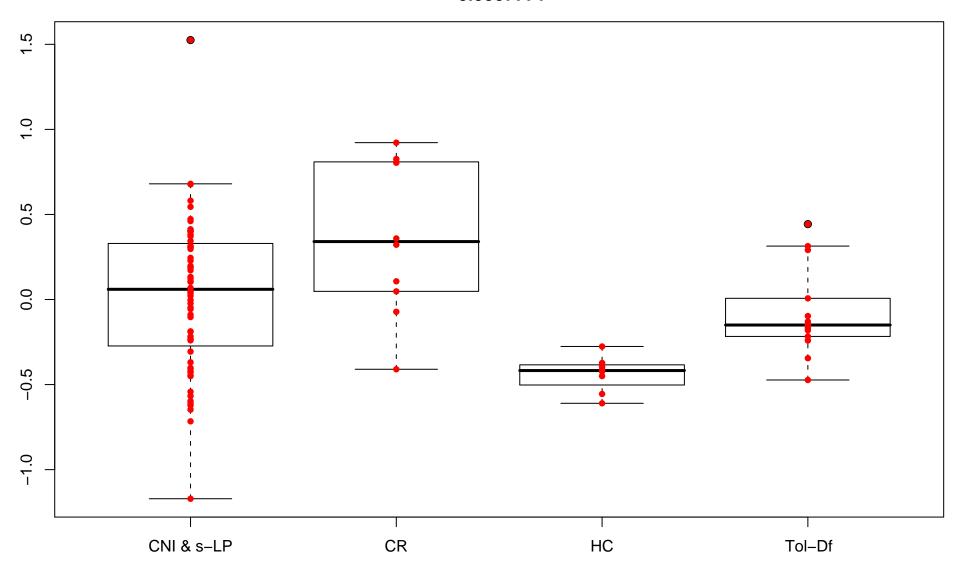
Rank 226 : SFT2D3 0.0007632



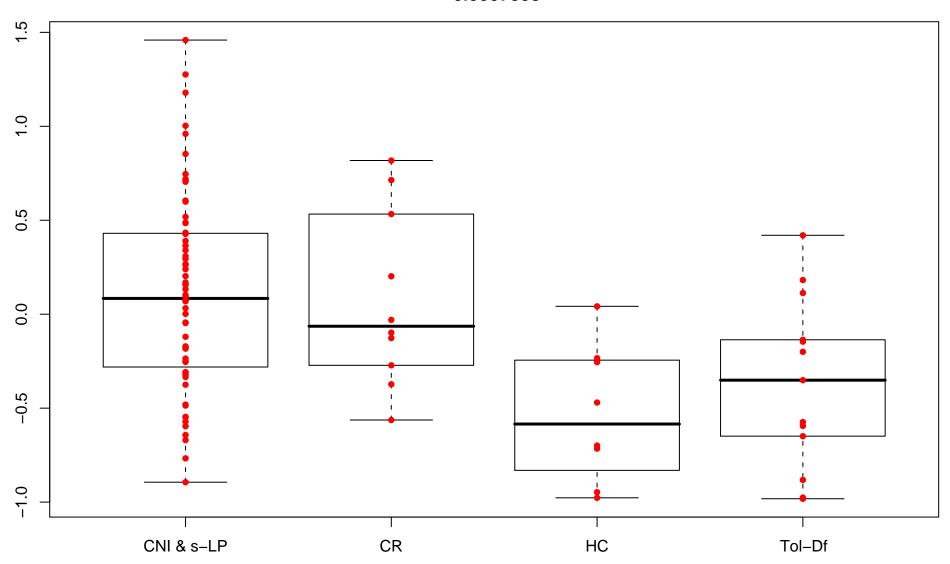
Rank 227 : C5ORF28 0.0007689



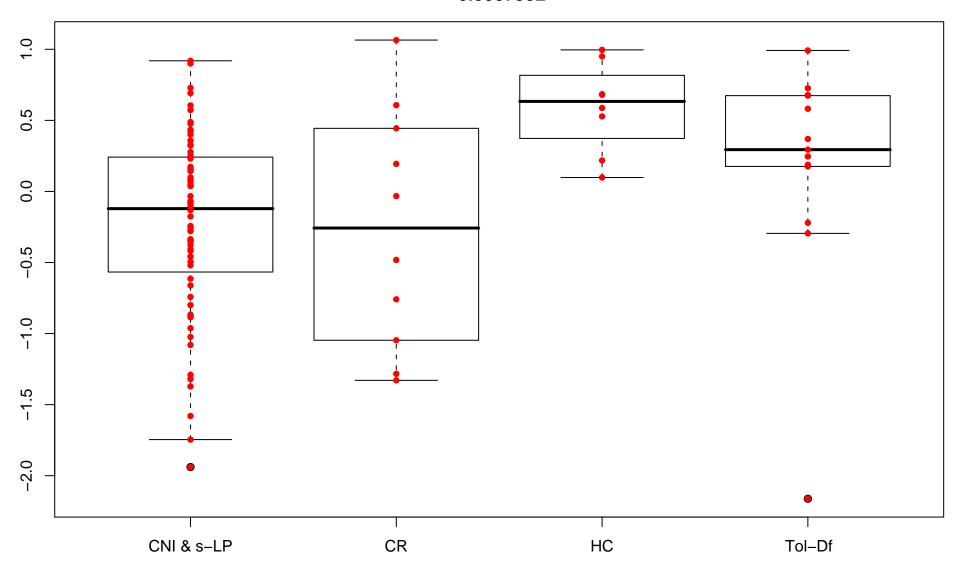
Rank 228 : STX11 0.0007771



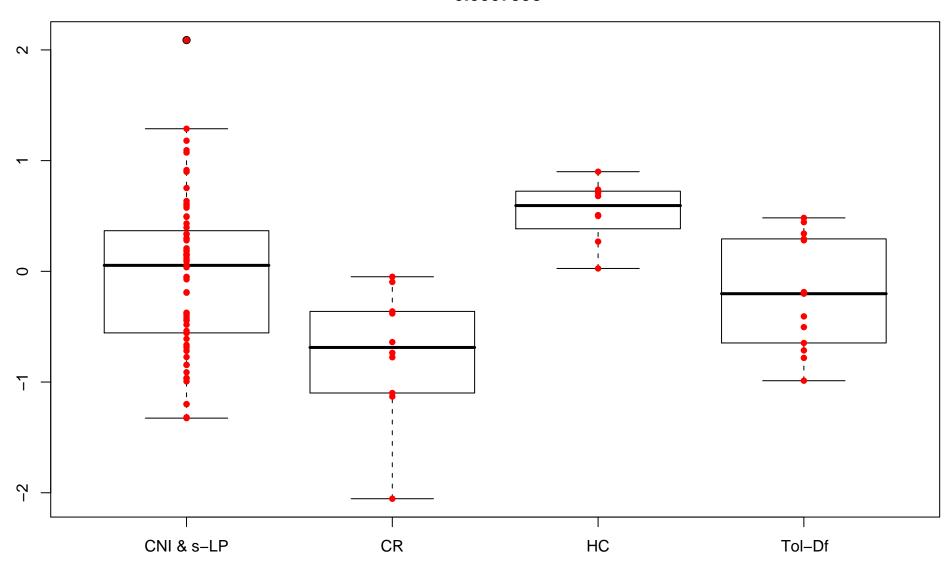
Rank 229 : ITGA1 0.0007853



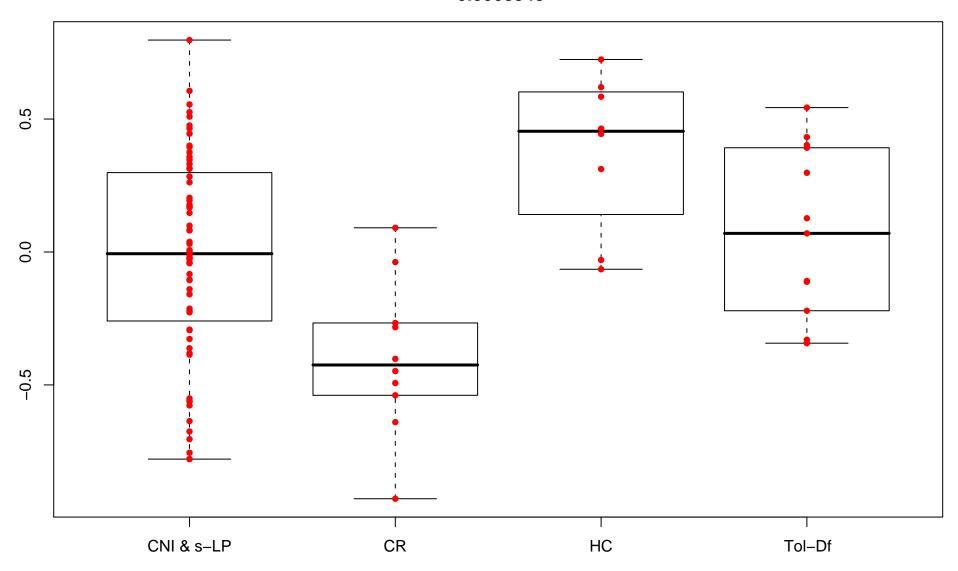
Rank 230 : PHLDB2 0.0007932



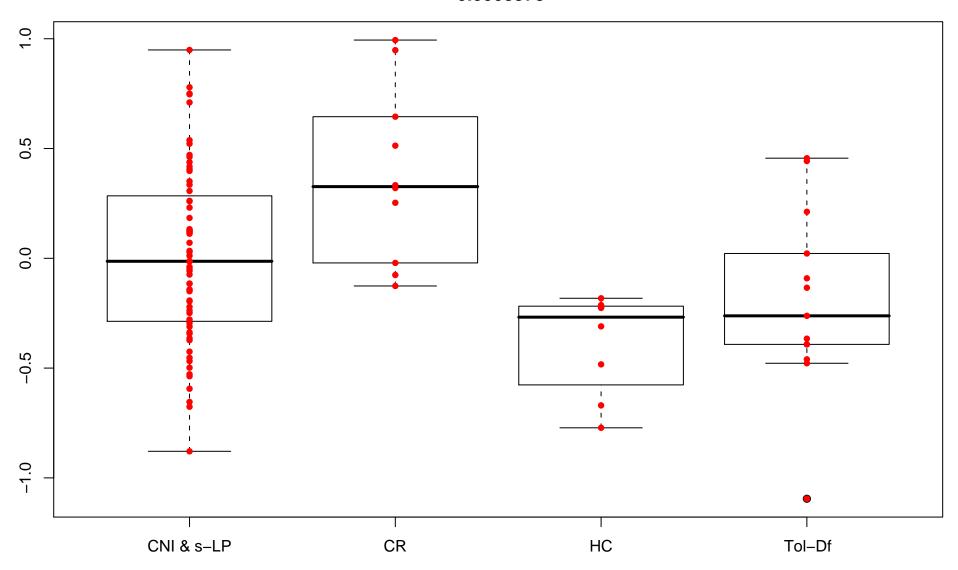
Rank 231 : A\_23\_P399604 0.0007998



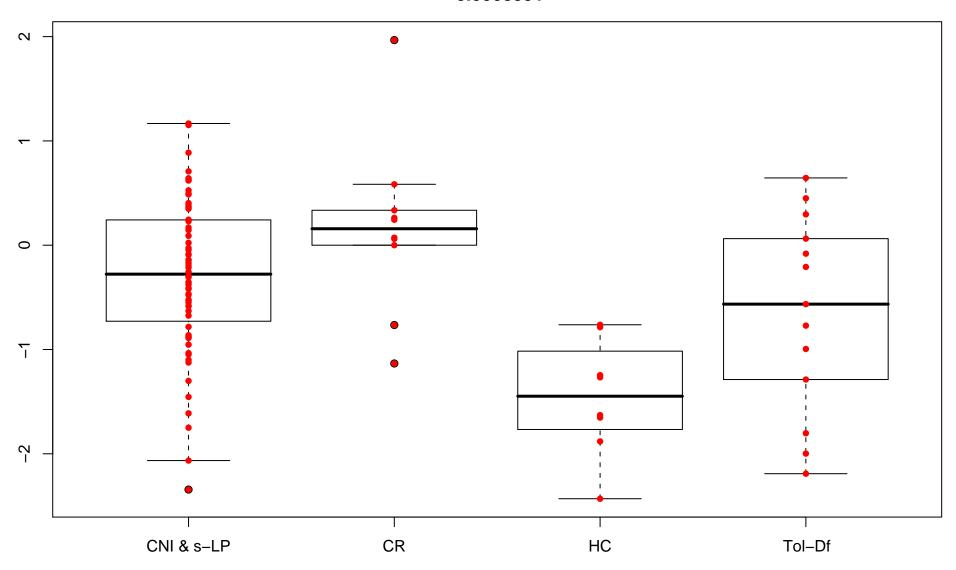
Rank 232 : GTL3 0.0008345



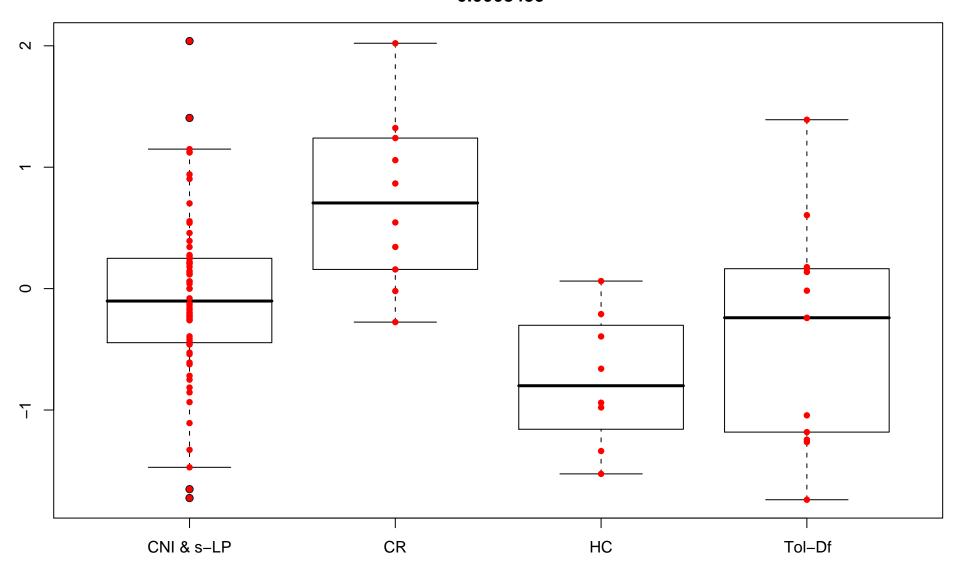
Rank 233 : ITSN2 0.0008378



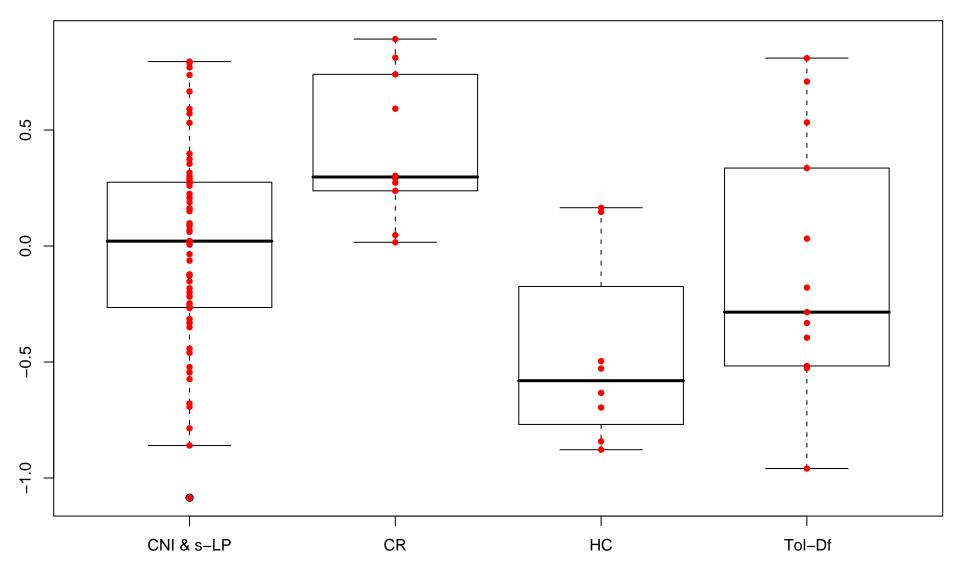
Rank 234 : ARHGEF12 0.0008391



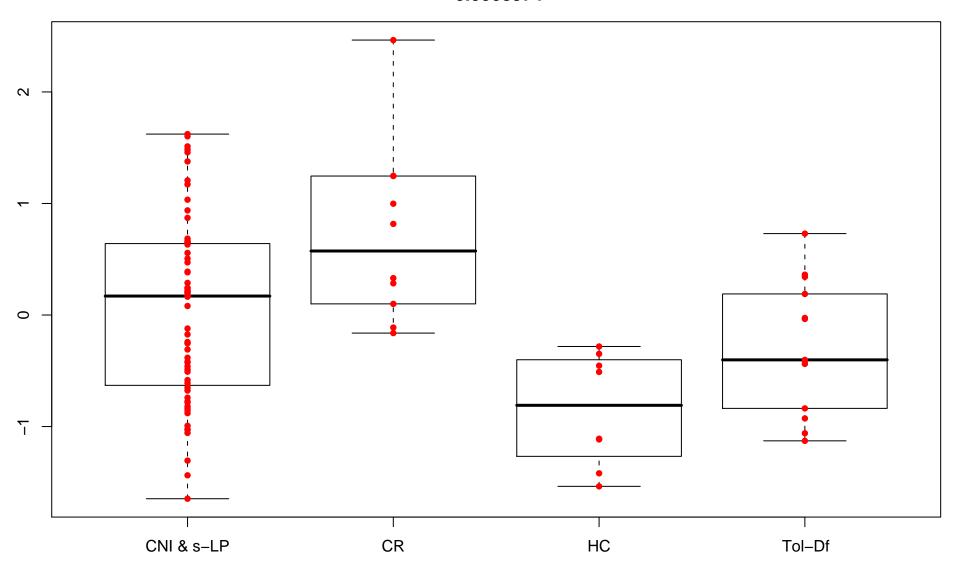
Rank 235 : LOC100131941 0.0008459



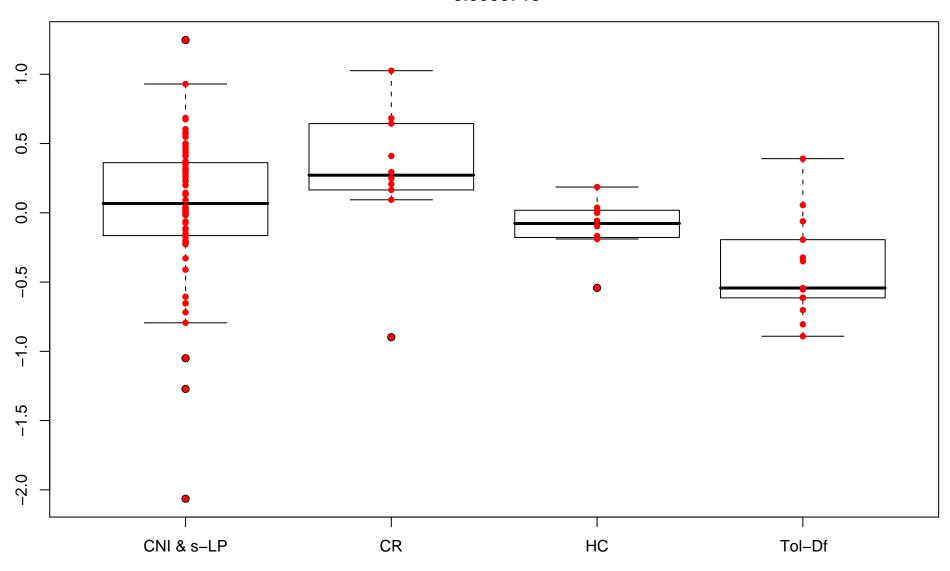
Rank 236 : MUC8 0.0008464



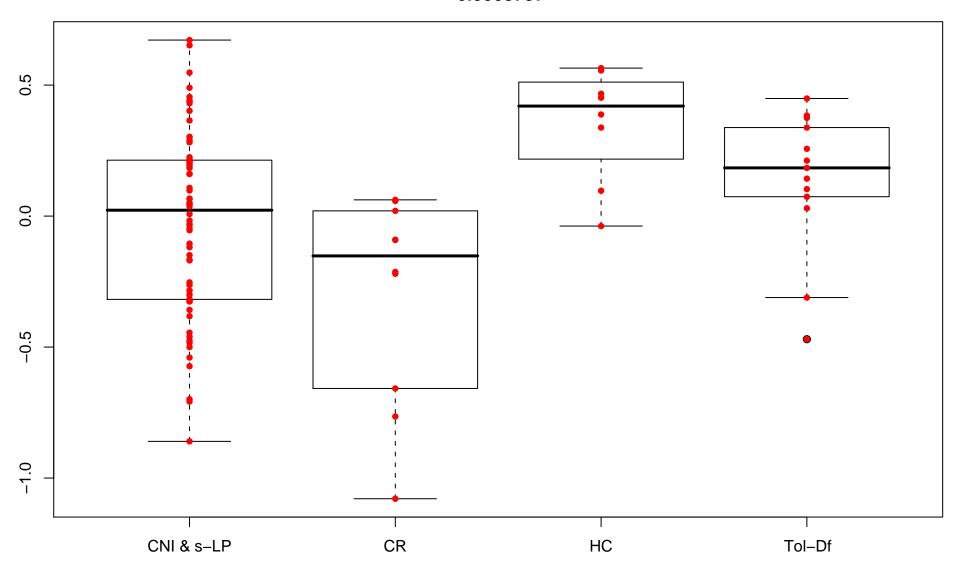
Rank 237 : ORM2 0.0008574



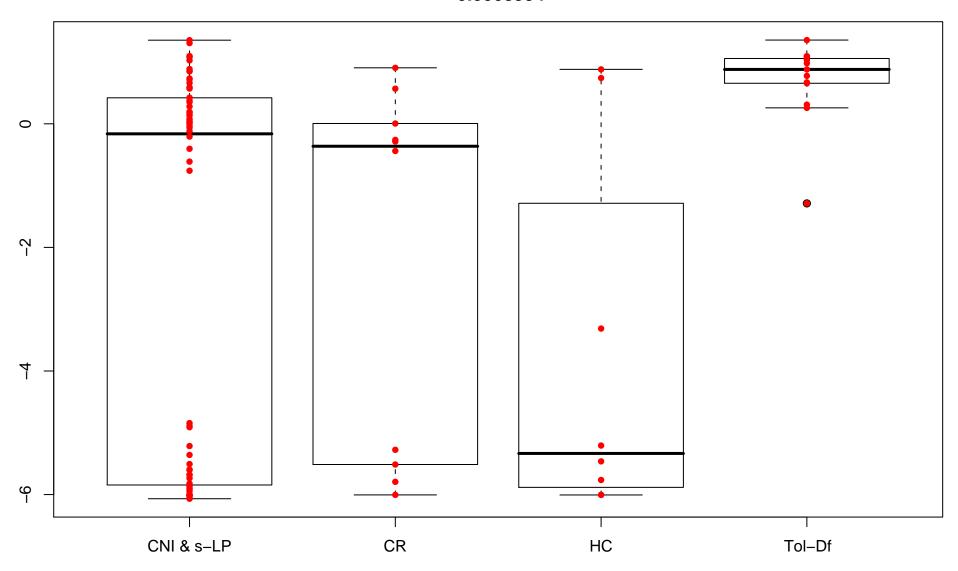
Rank 238 : FLJ22662 0.0008718



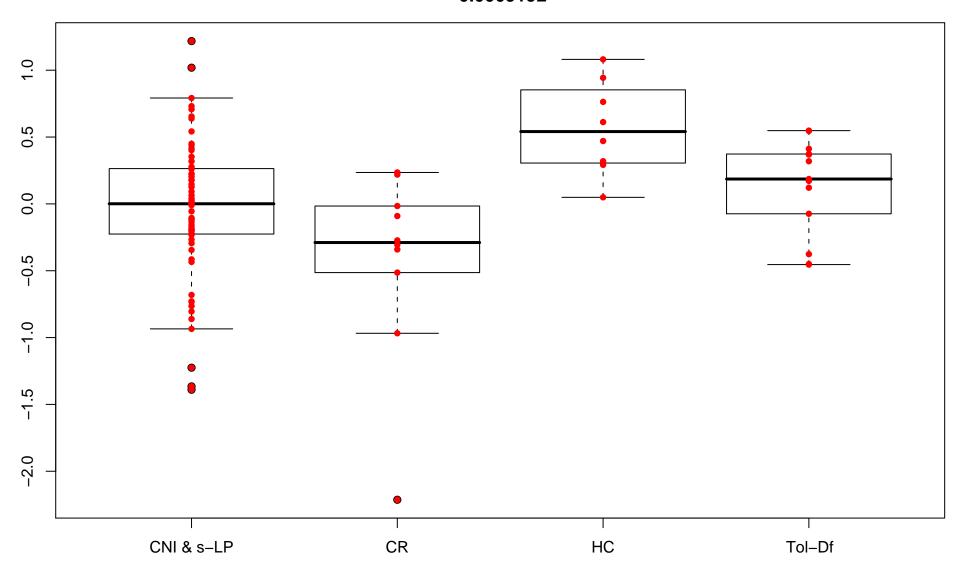
Rank 239 : APEX1 0.0008757



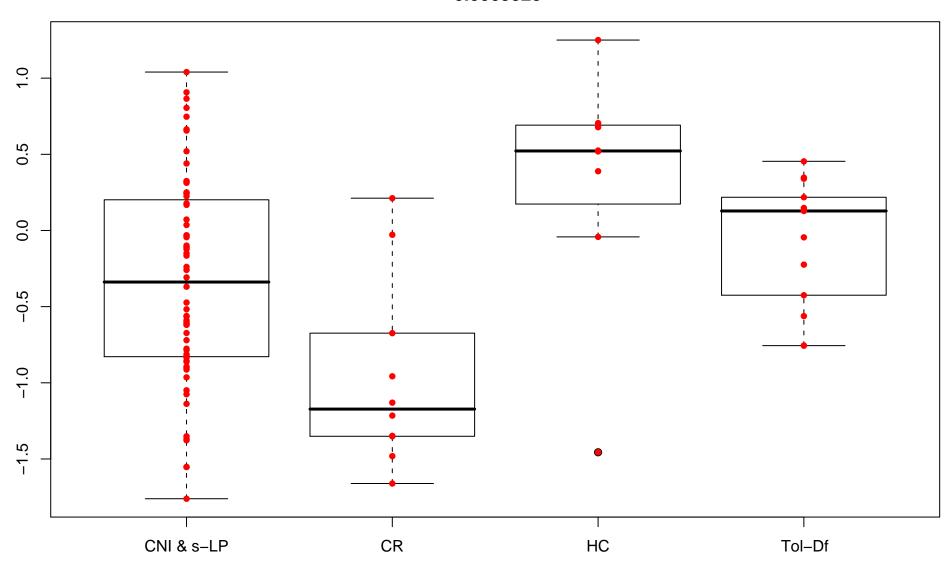
Rank 240 : RPS4Y1 0.0008954



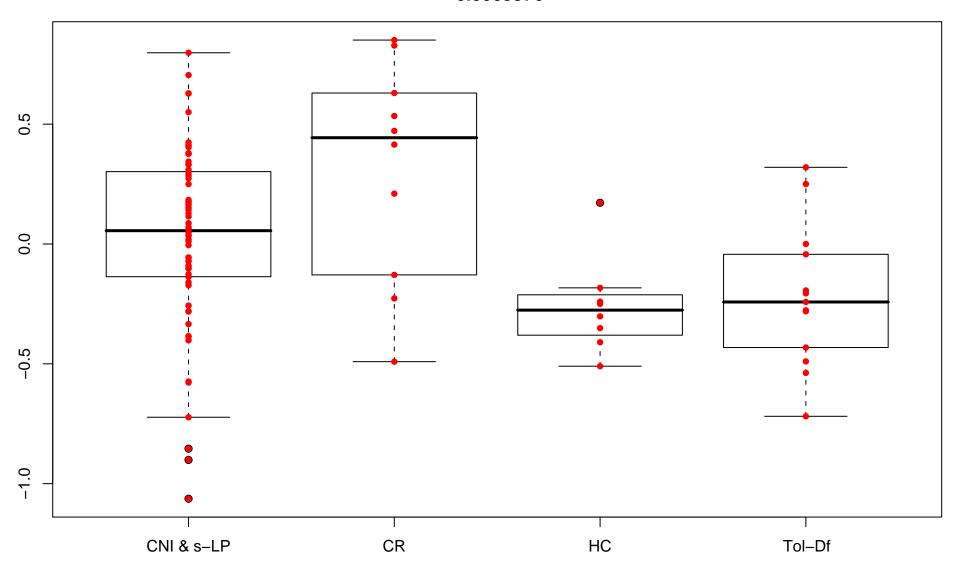
Rank 241 : LCK 0.0009192



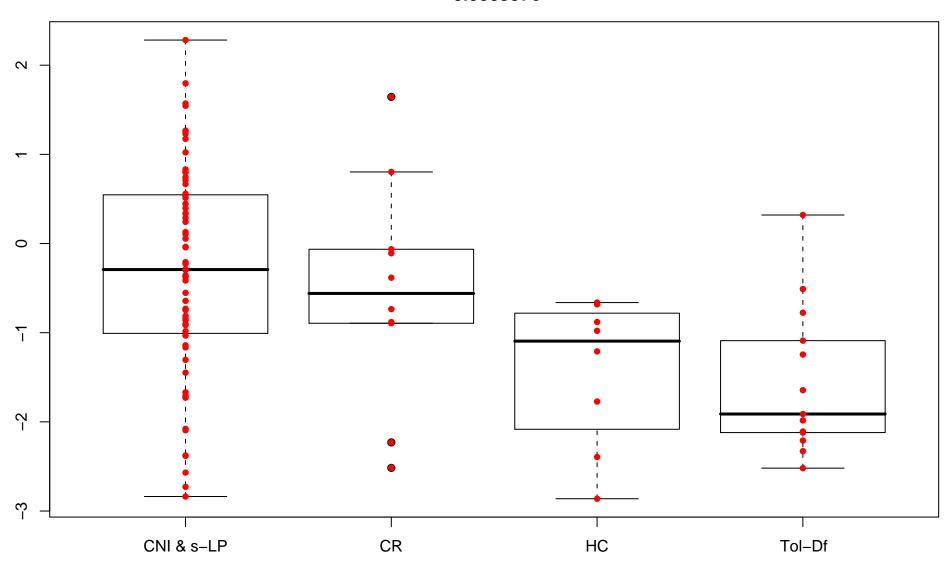
Rank 242 : LOC642897 0.0009525



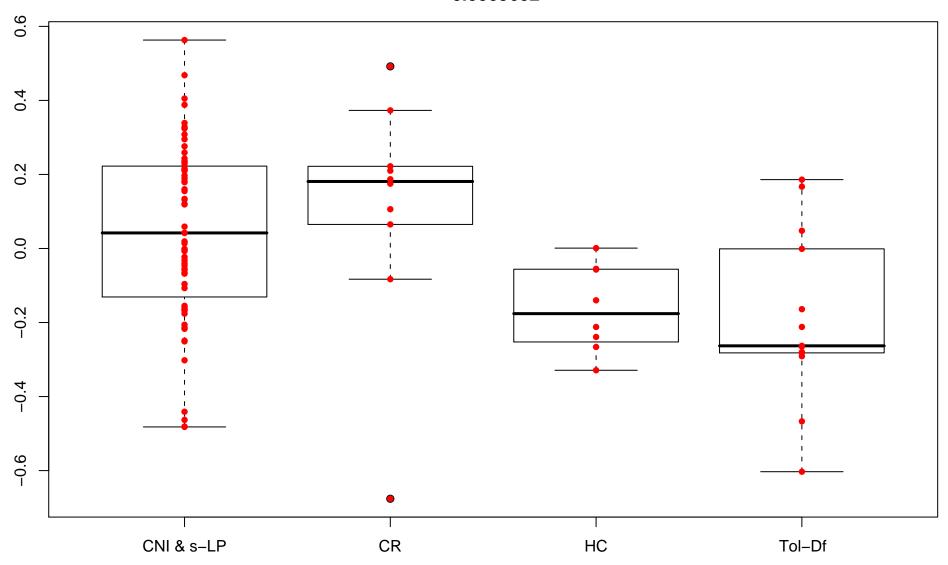
Rank 243 : MCL1 0.0009576



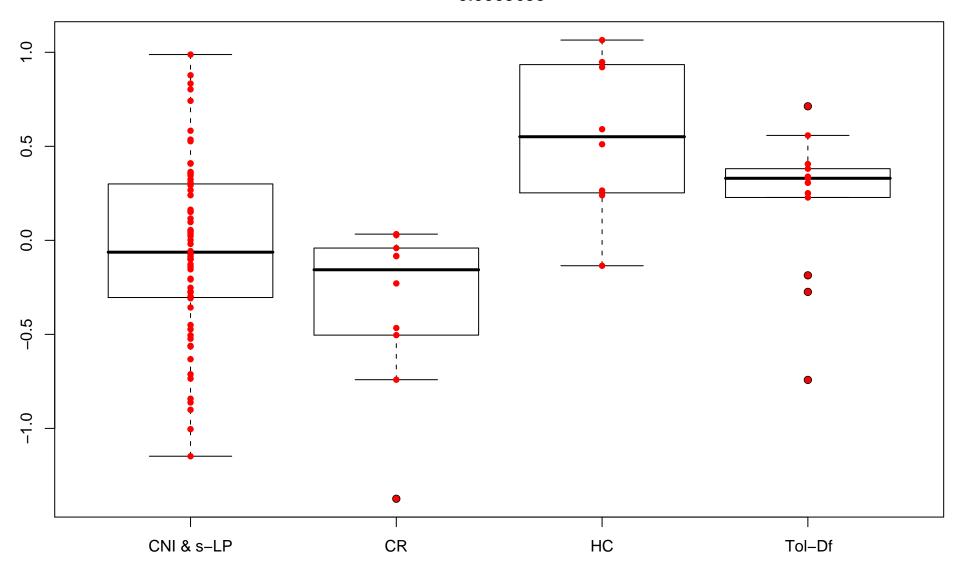
Rank 244 : SLC26A8 0.0009576



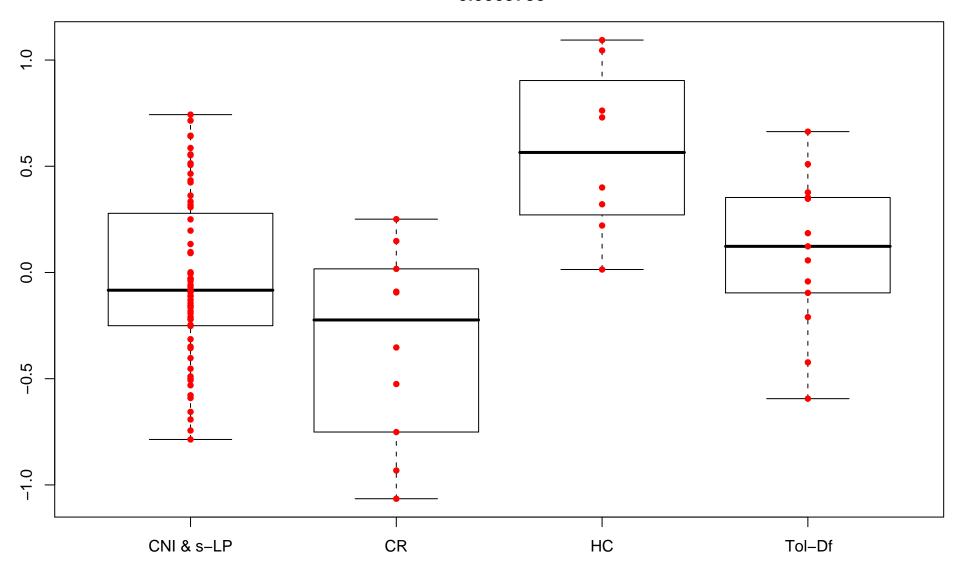
Rank 245 : PSMB3 0.0009602



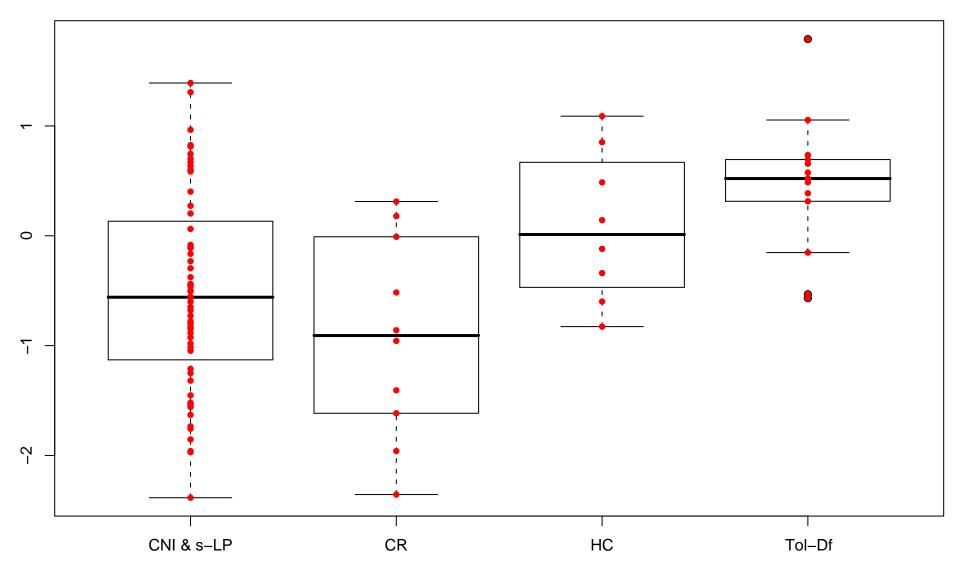
Rank 246 : CD247 0.0009699



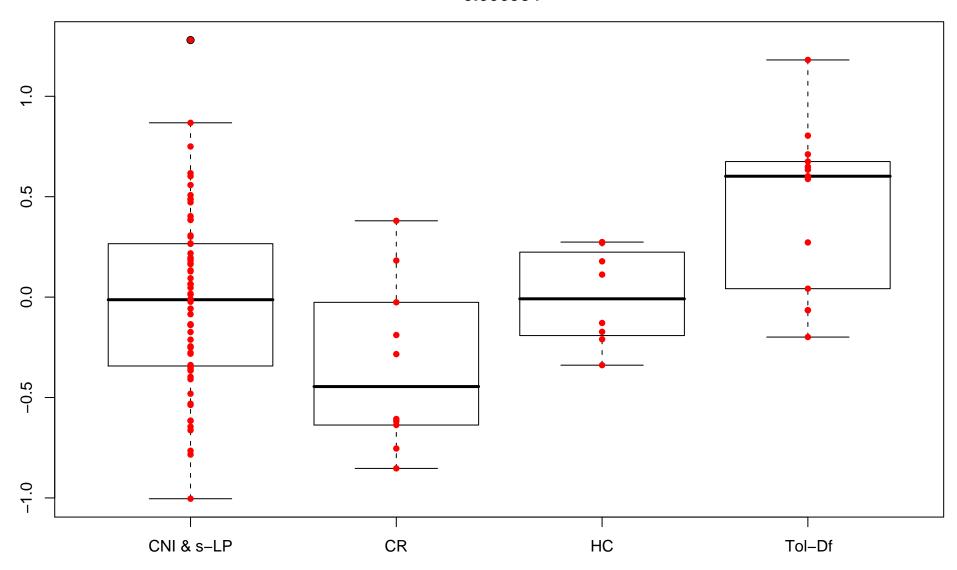
Rank 247 : UPF3A 0.0009735



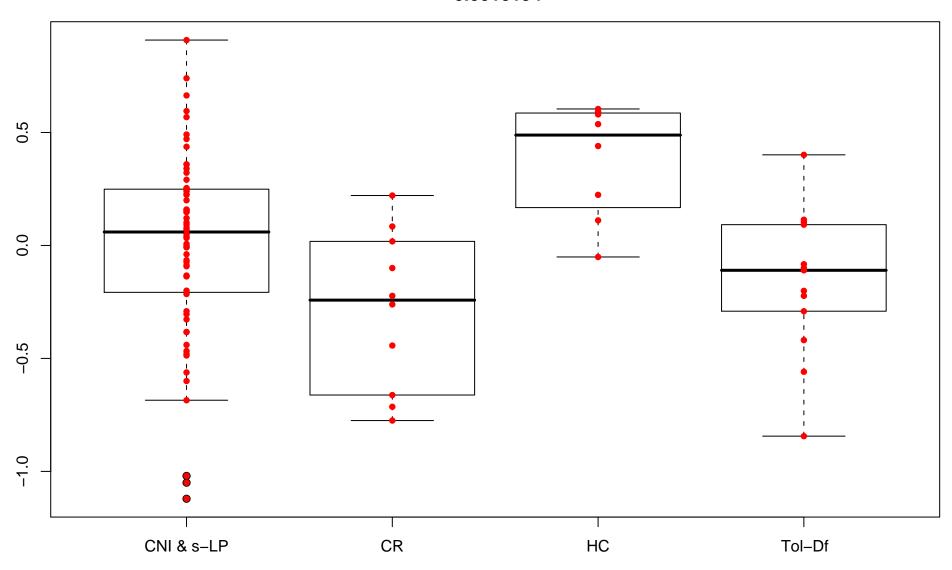
Rank 248 : RGS1 0.0009772



Rank 249 : RBM3 0.000984

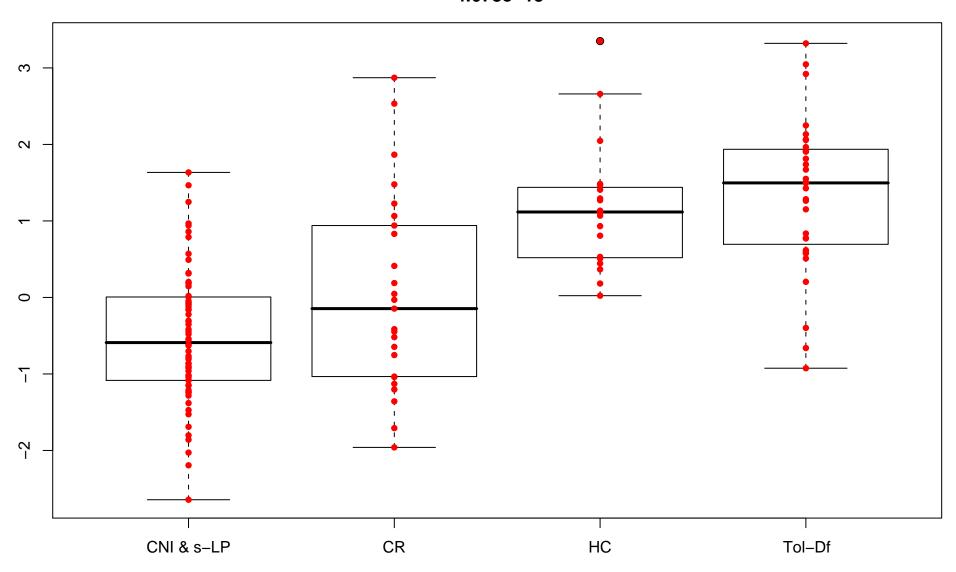


Rank 250 : POLR3H 0.0010194

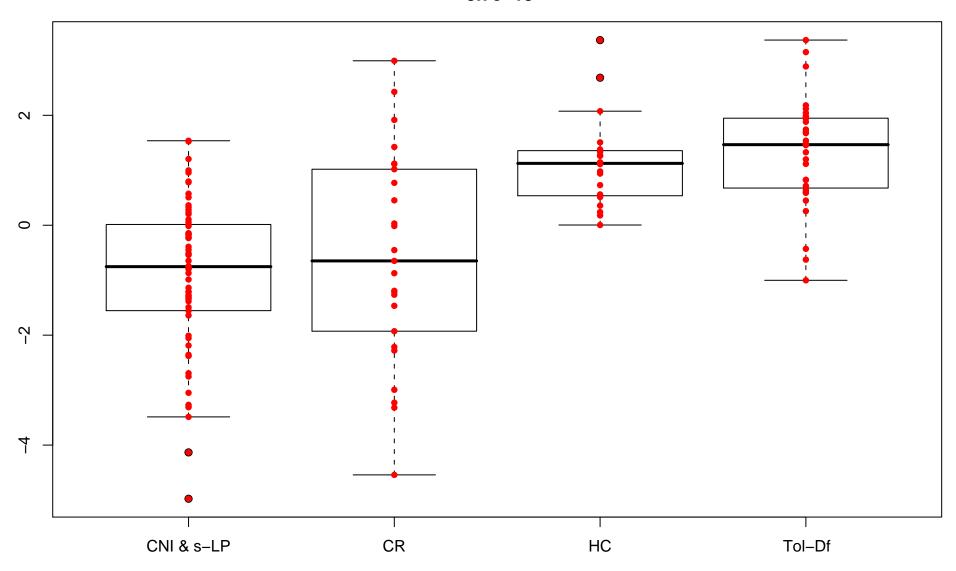


## Figure 5B

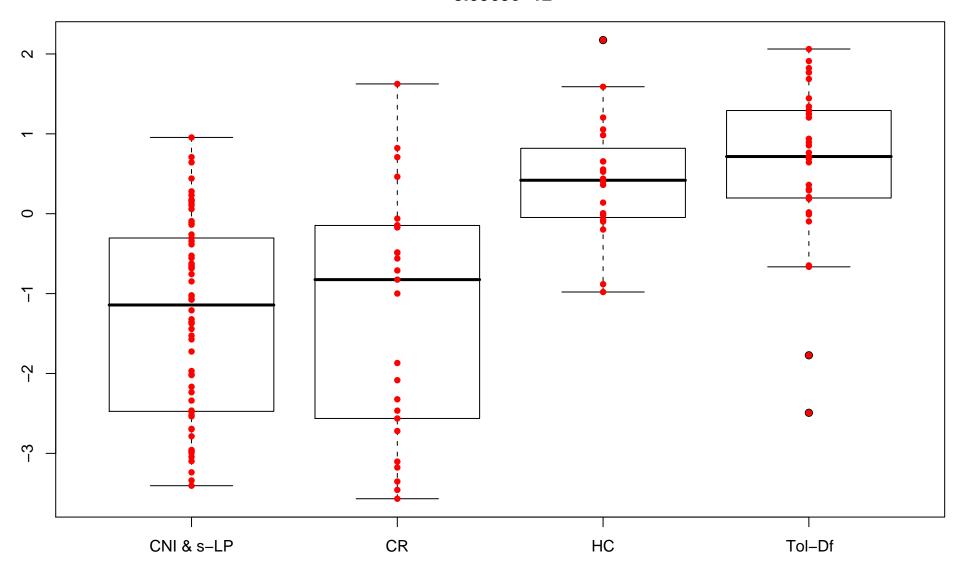
Rank 1: TCL1A 4.678e-13



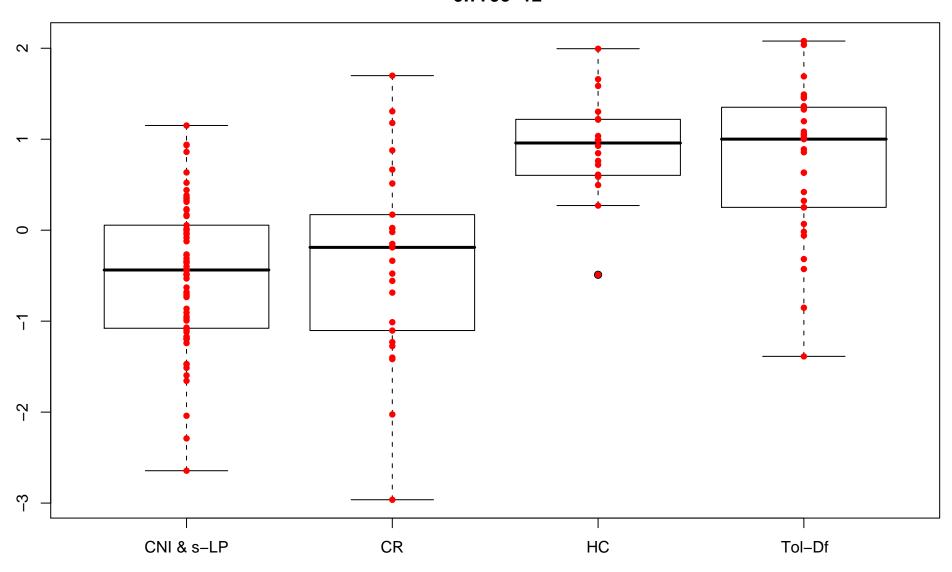
Rank 2: TCL1A 8.7e-13



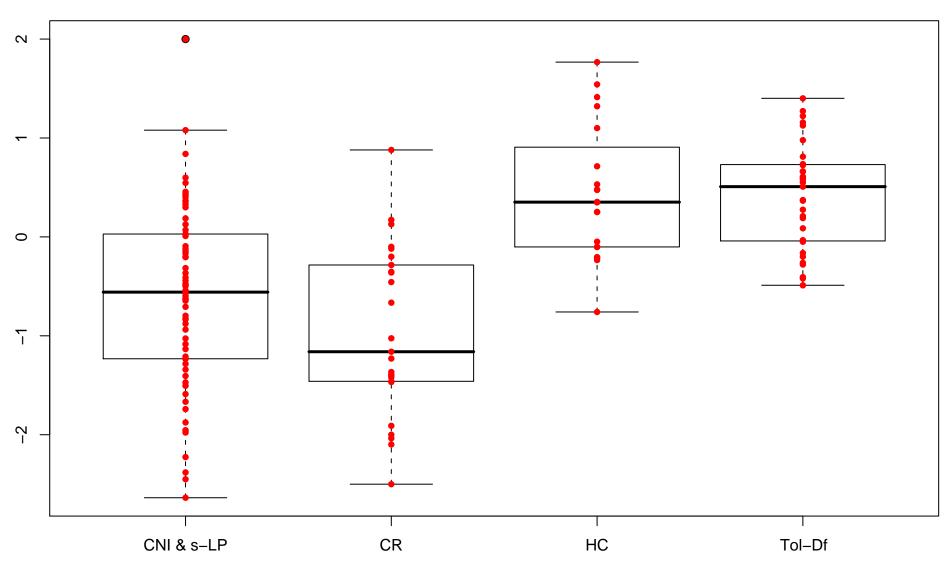
Rank 3: HS3ST1 3.0965e-12



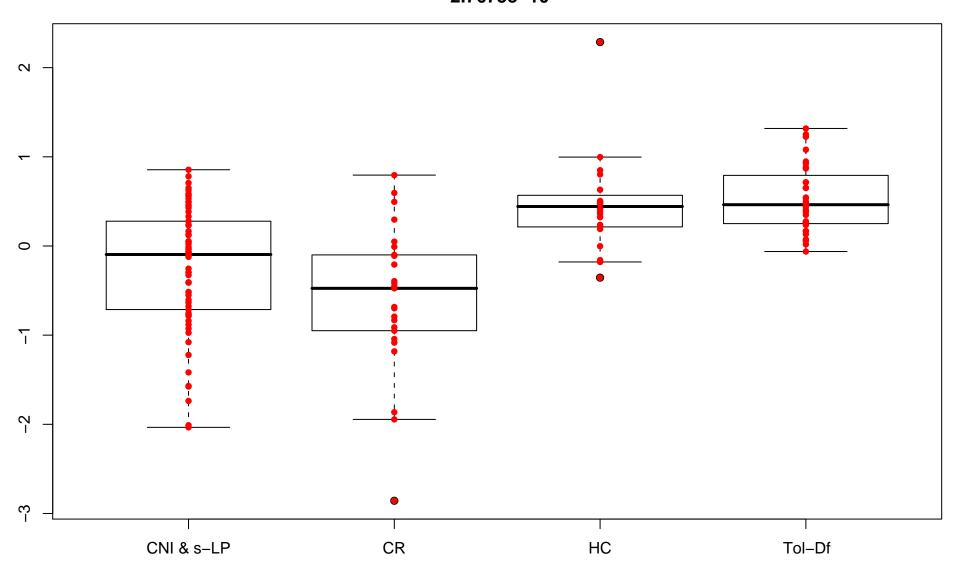
Rank 4: CD200 9.779e-12



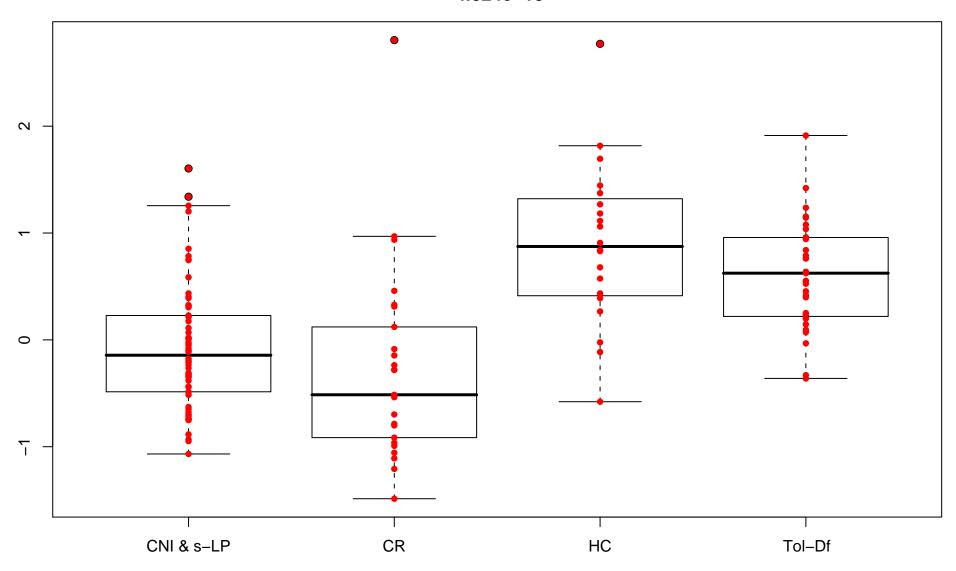
Rank 5 : ADAMTS4 6.583e-11



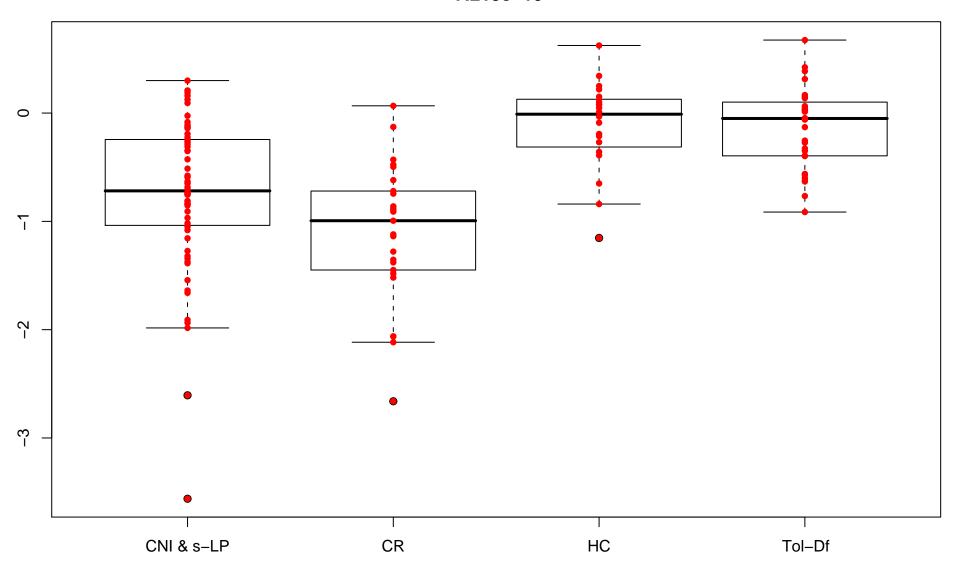
Rank 6: CTLA4 2.7675e-10



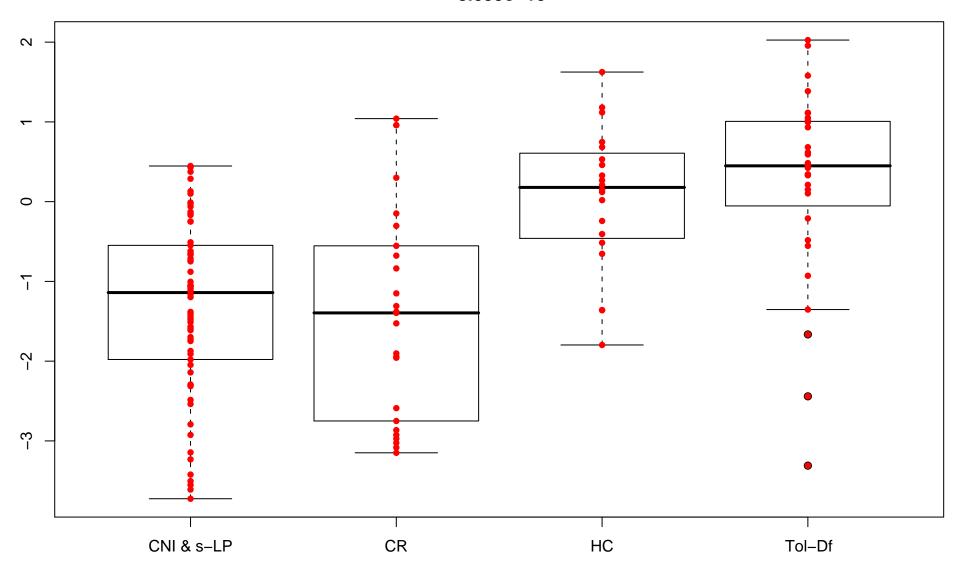
Rank 7: GPR44 4.024e-10



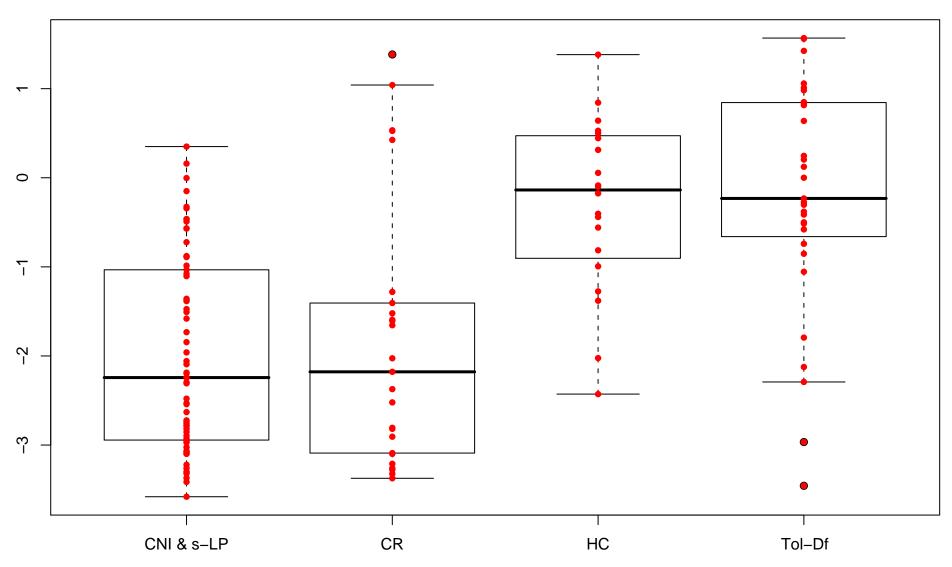
Rank 8: TBC1D4 7.215e-10



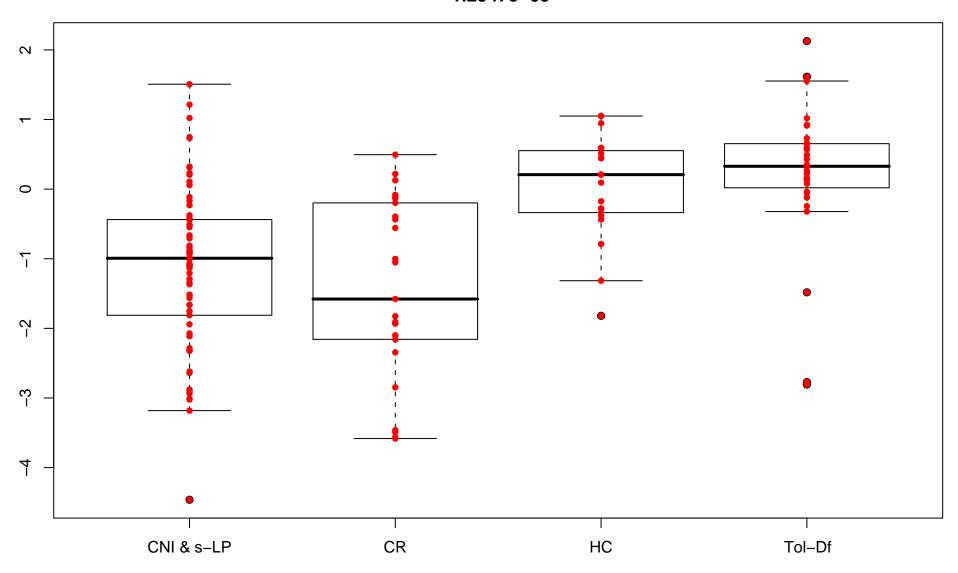
Rank 9: PCDH9 8.099e-10



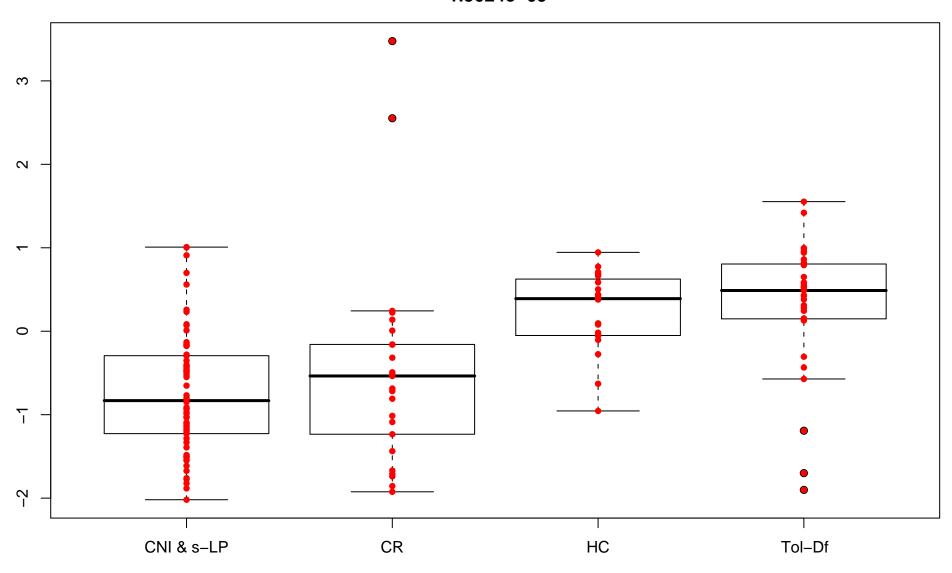
Rank 10: THC2317432 8.651e-10



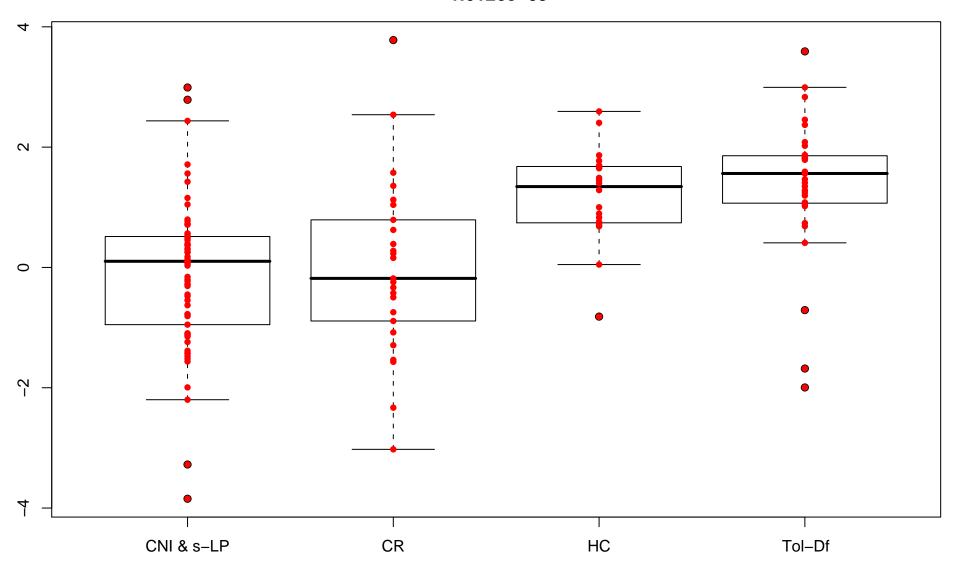
Rank 11 : IGKV3-20 1.2947e-09



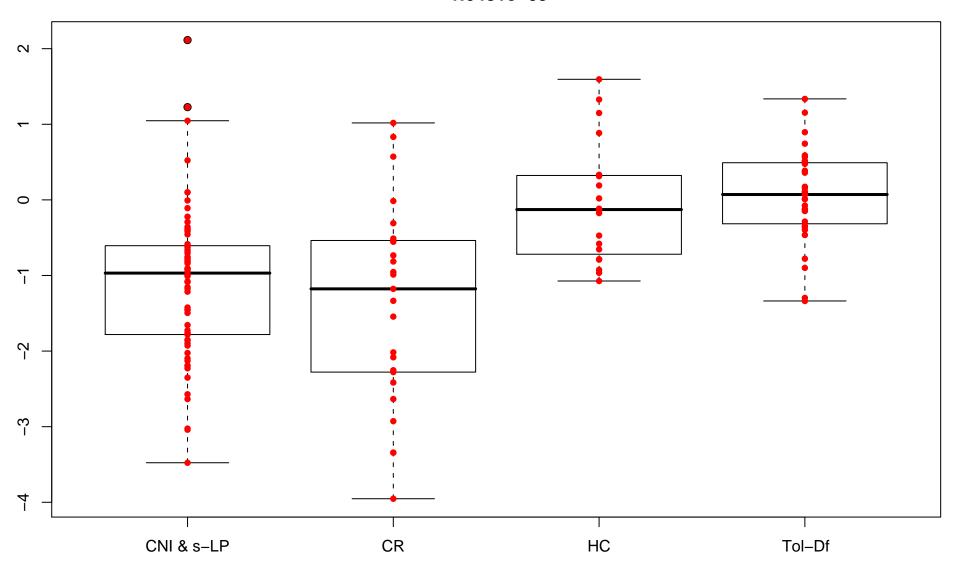
Rank 12: CD79B 1.5024e-09



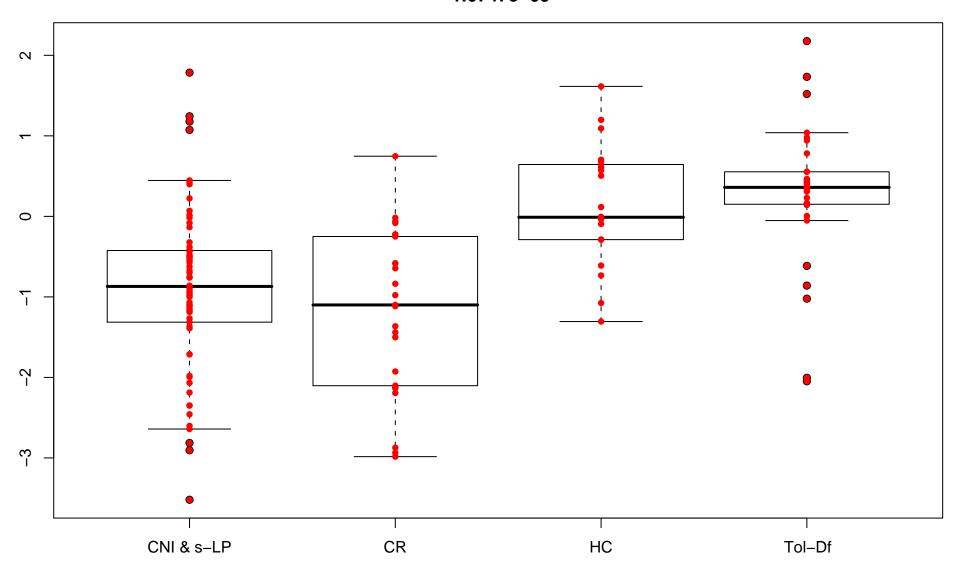
Rank 13: IGHM 1.6126e-09



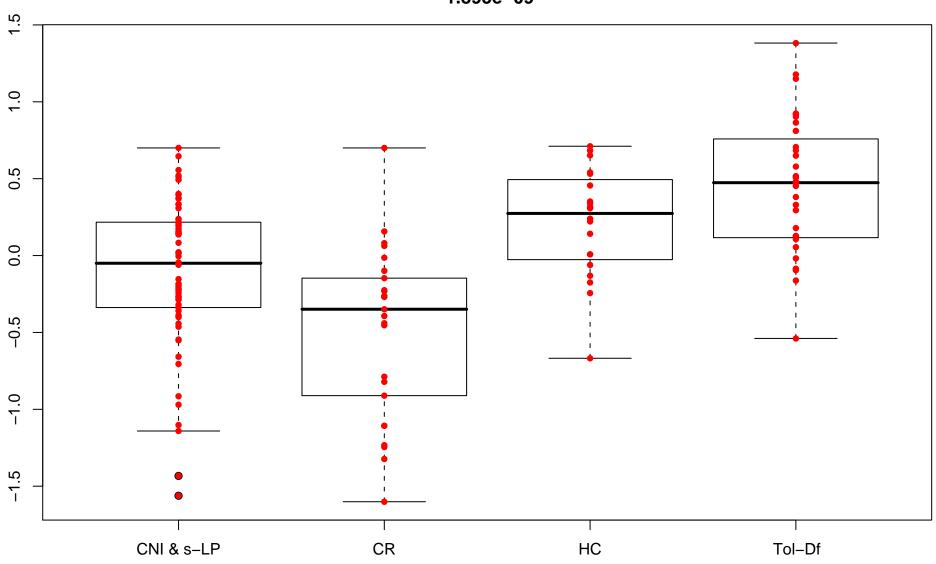
Rank 14: MGC29506 1.6481e-09



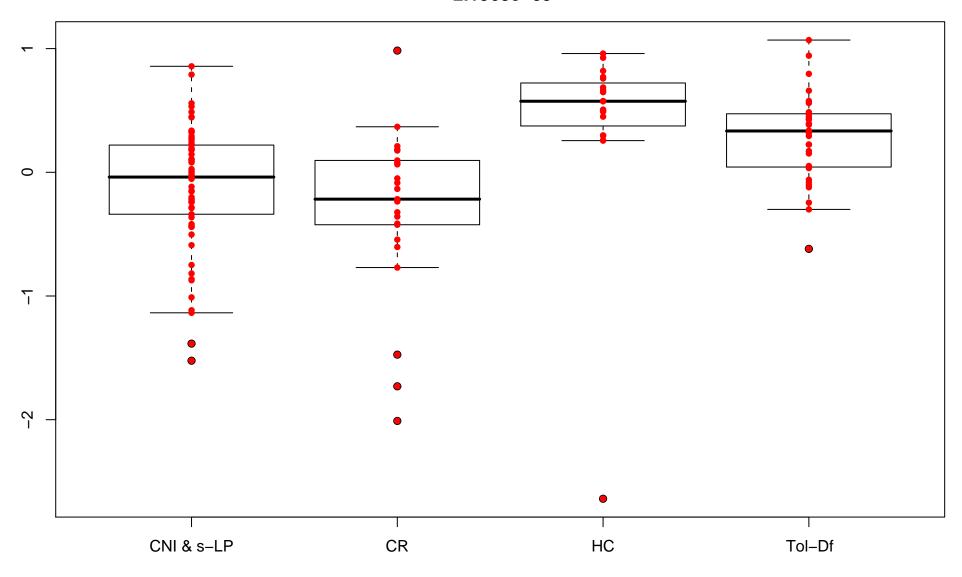
Rank 15 : IGKC 1.6747e-09



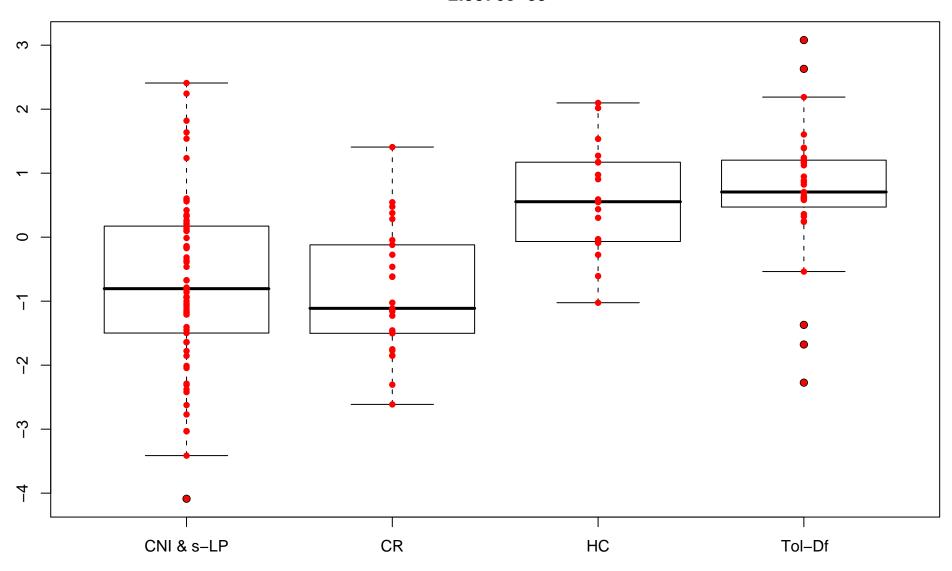
Rank 16 : CD247 1.895e-09



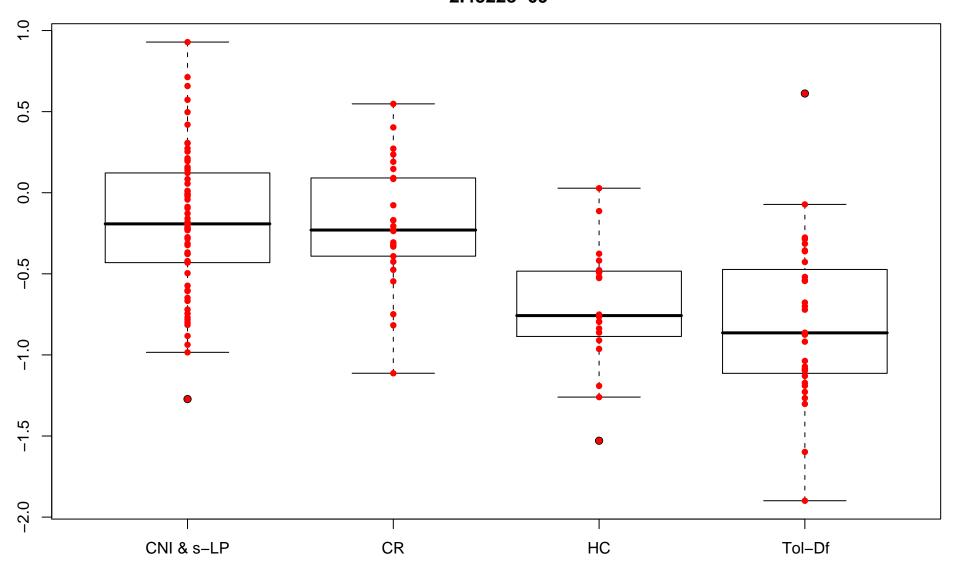
Rank 17: BTG1 2.1968e-09



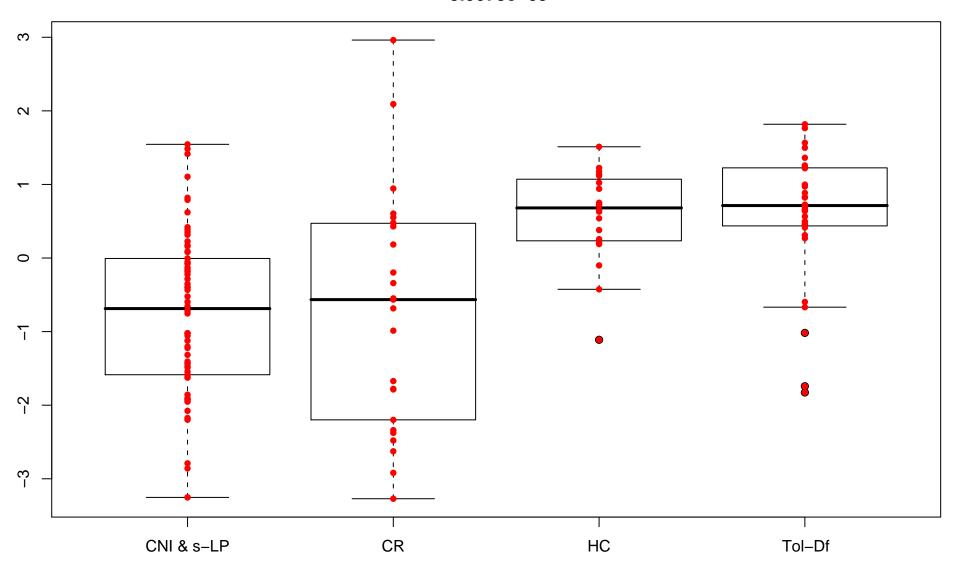
Rank 18: LOC100132941 2.3376e-09



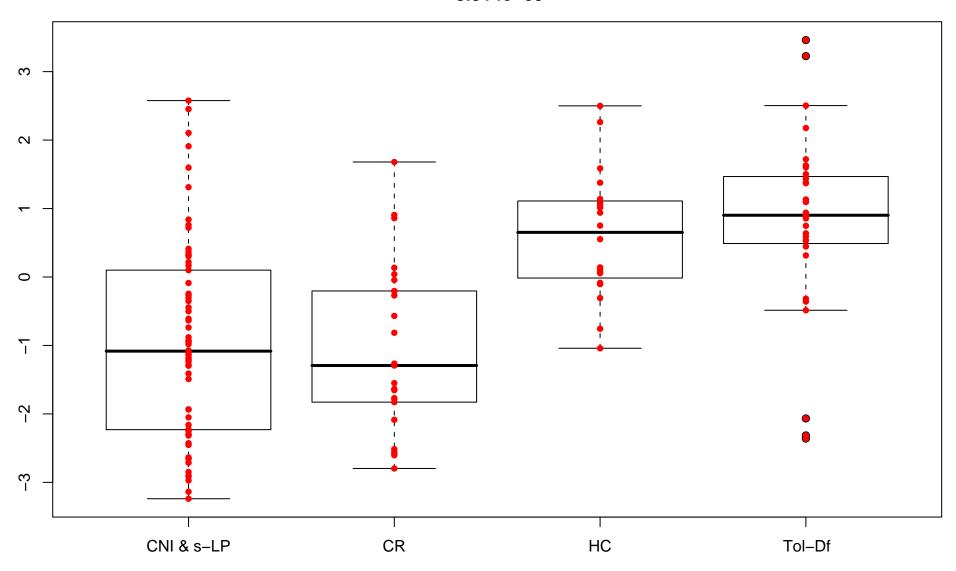
Rank 19: MCTP1 2.4322e-09



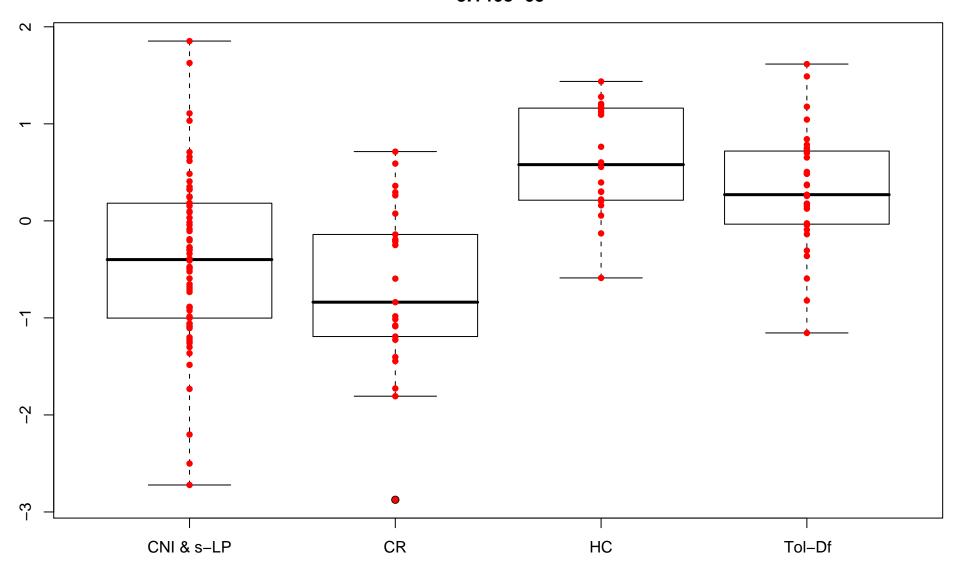
Rank 20 : BLNK 3.0073e-09



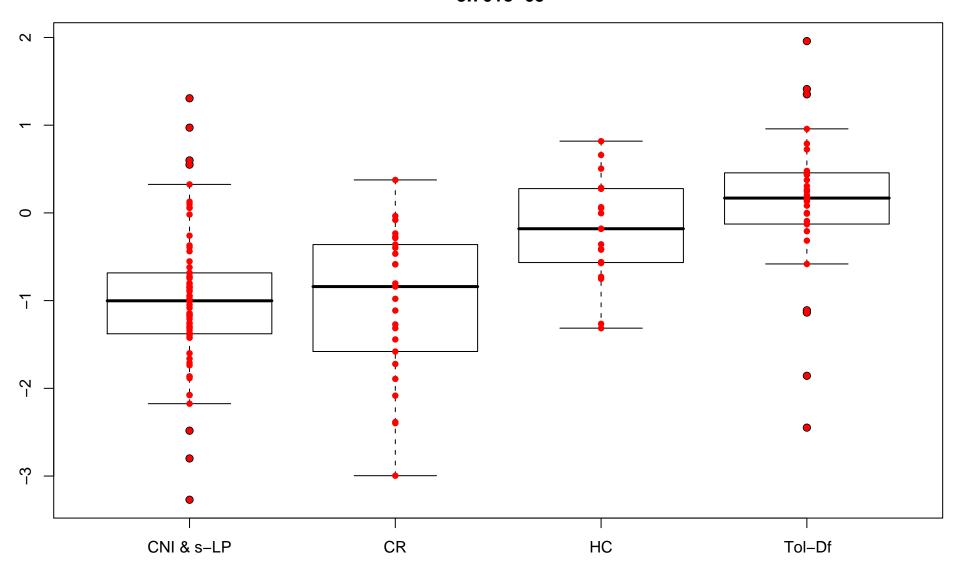
Rank 21 : LOC652494 3.914e-09



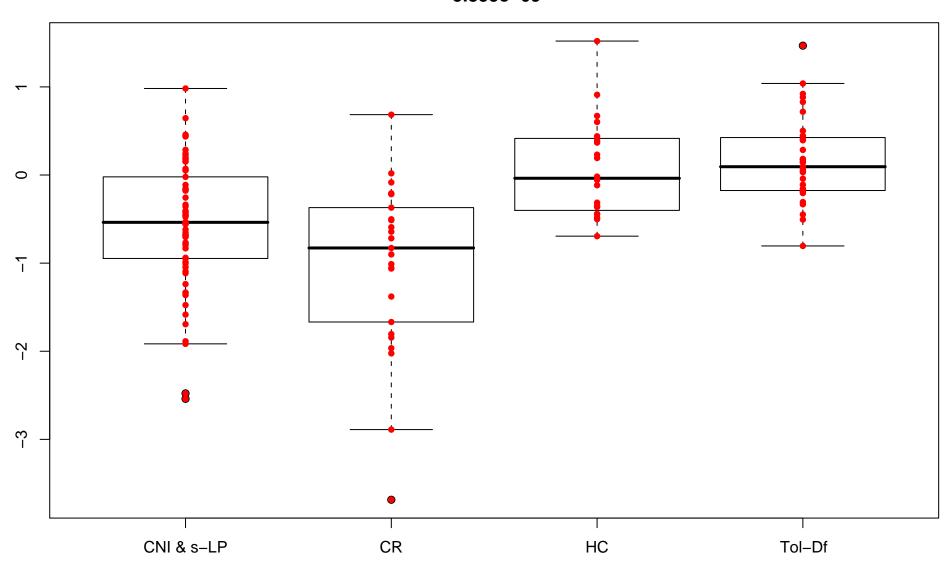
Rank 22 : RGS1 5.146e-09



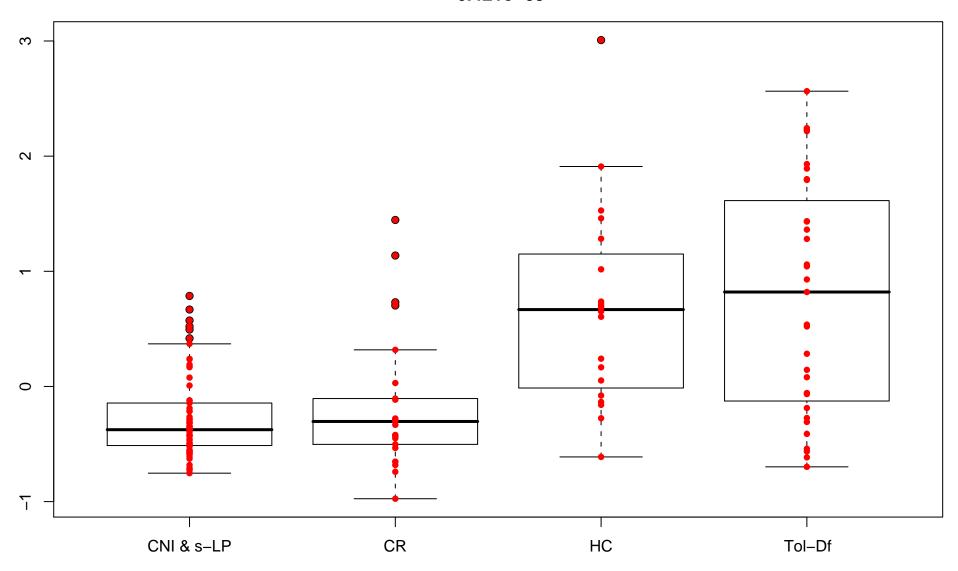
Rank 23: AY062331 5.701e-09



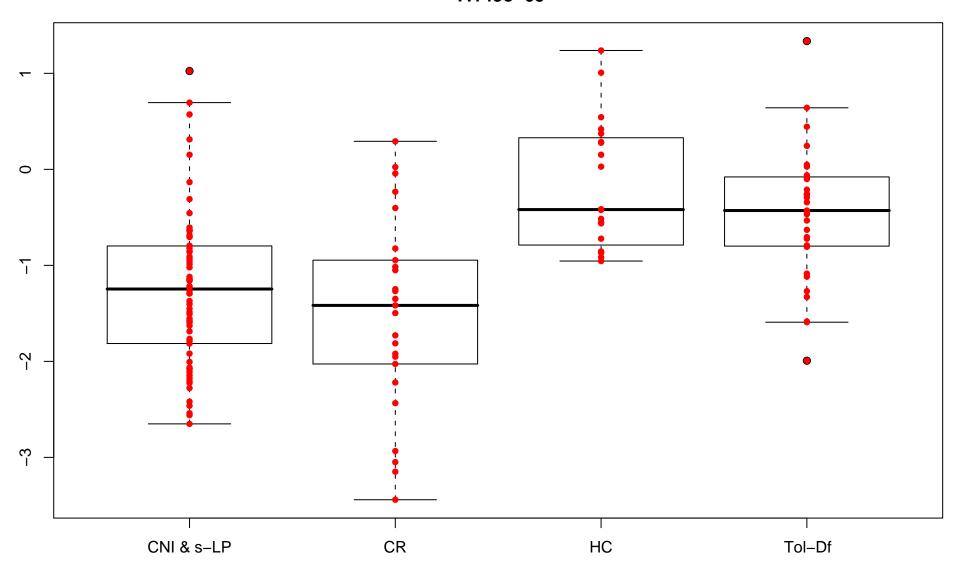
Rank 24 : ICOS 5.855e-09



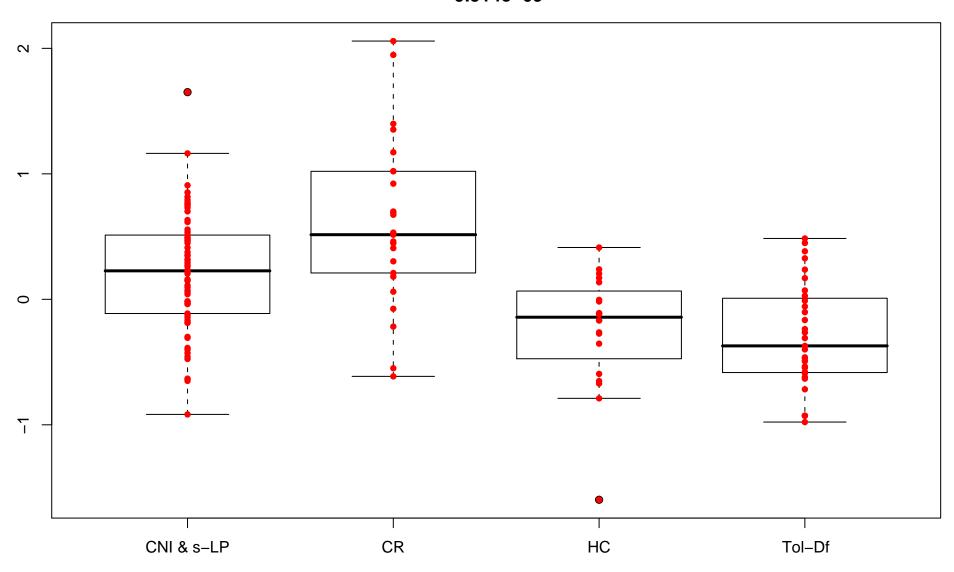
Rank 25 : CR613436 6.421e-09



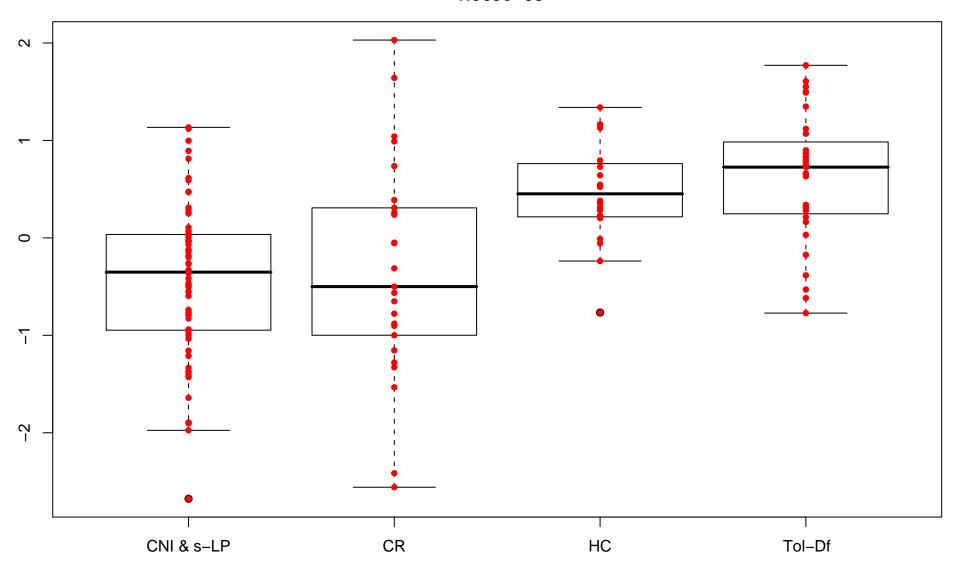
Rank 26 : IGJ 7.149e-09



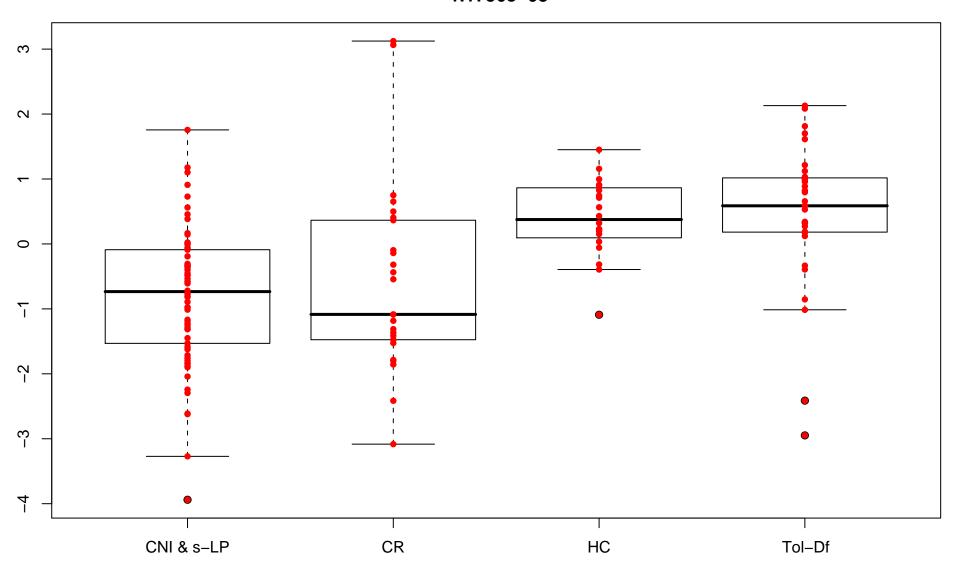
Rank 27 : BMP2K 9.514e-09



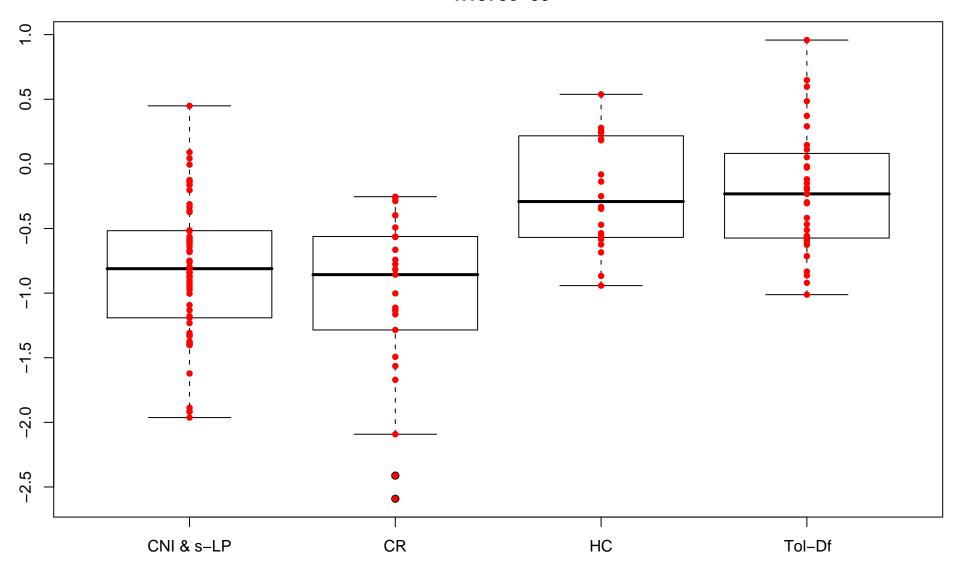
Rank 28 : BTLA 1.069e-08



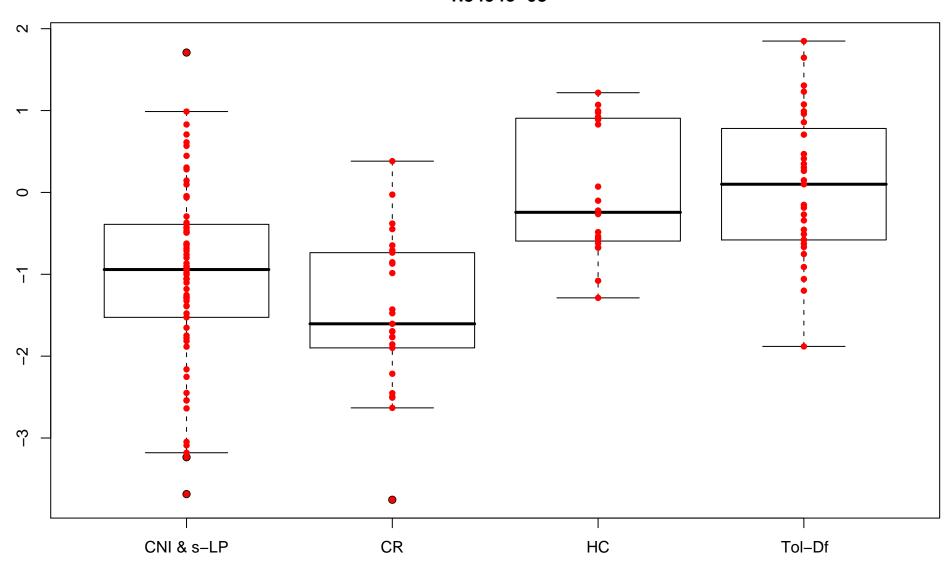
Rank 29 : CD79A 1.1756e-08



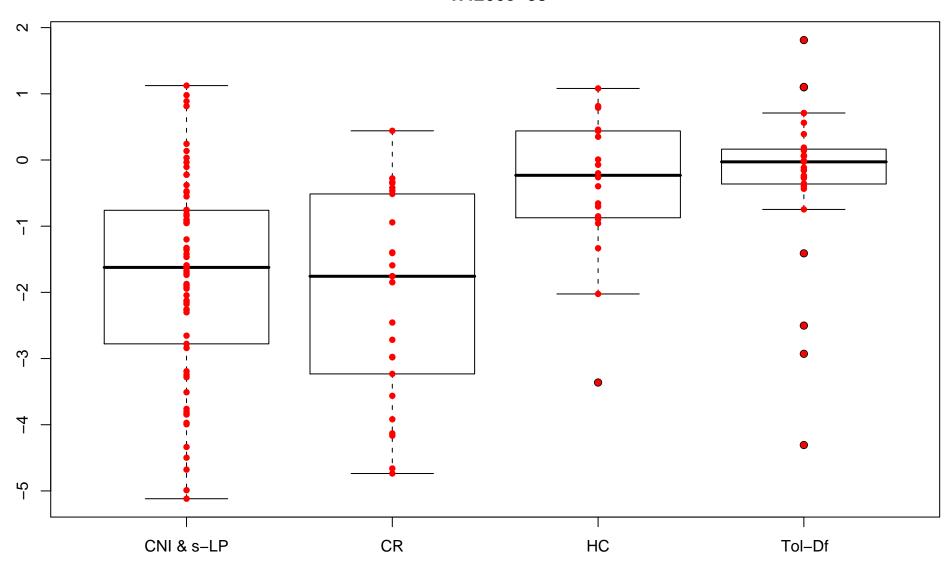
Rank 30 : OCIAD2 1.1973e-08



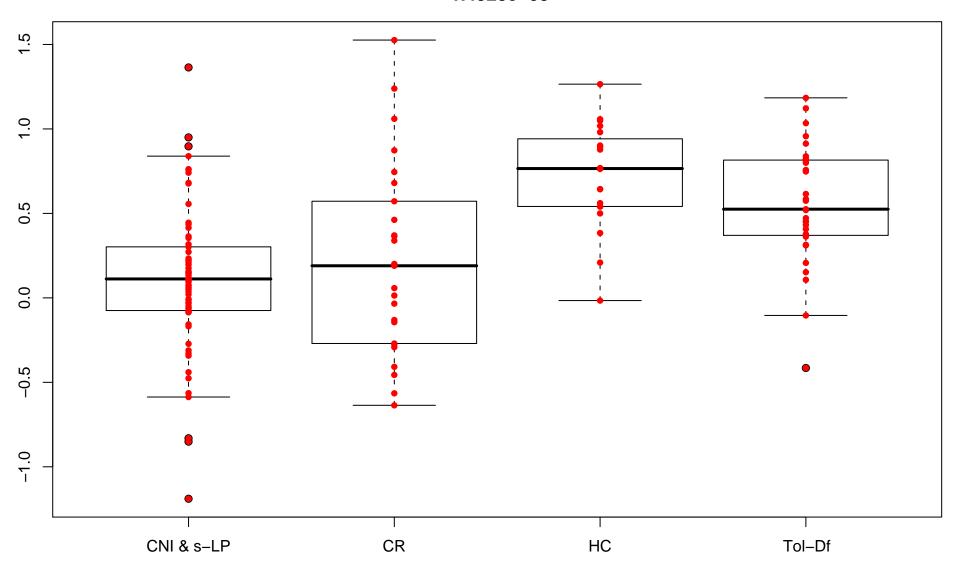
Rank 31 : FHIT 1.3494e-08



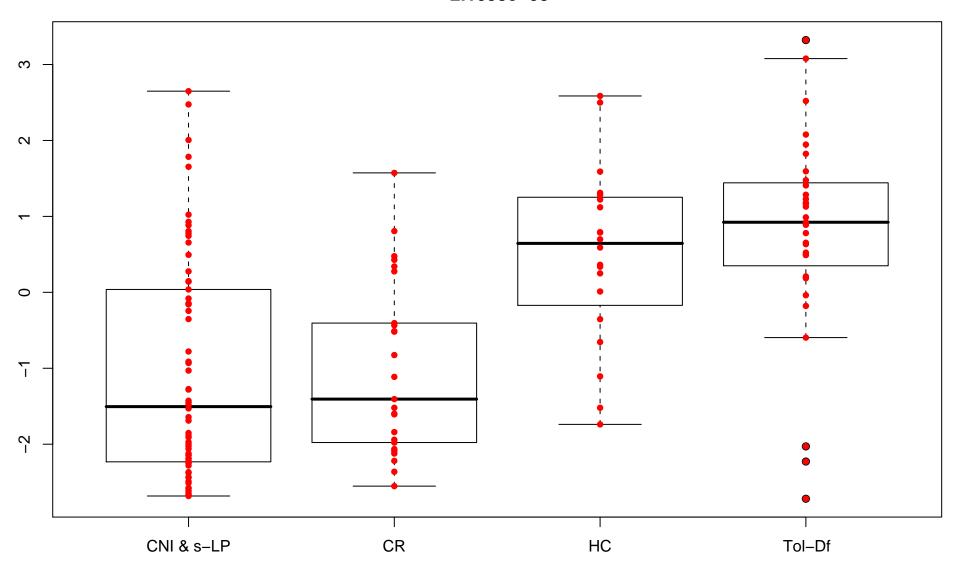
Rank 32: ENST00000359488 1.4266e-08



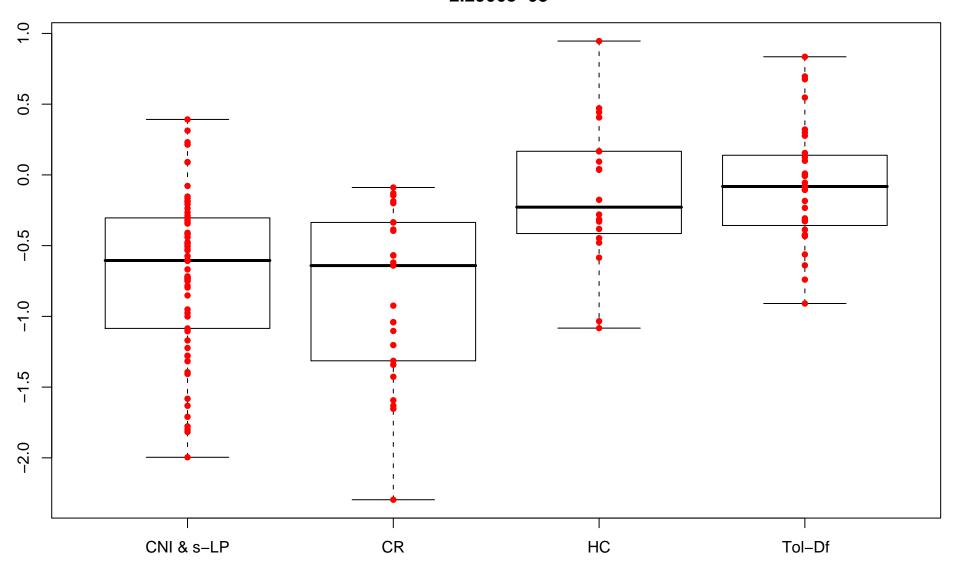
Rank 33: IRF8 1.4928e-08



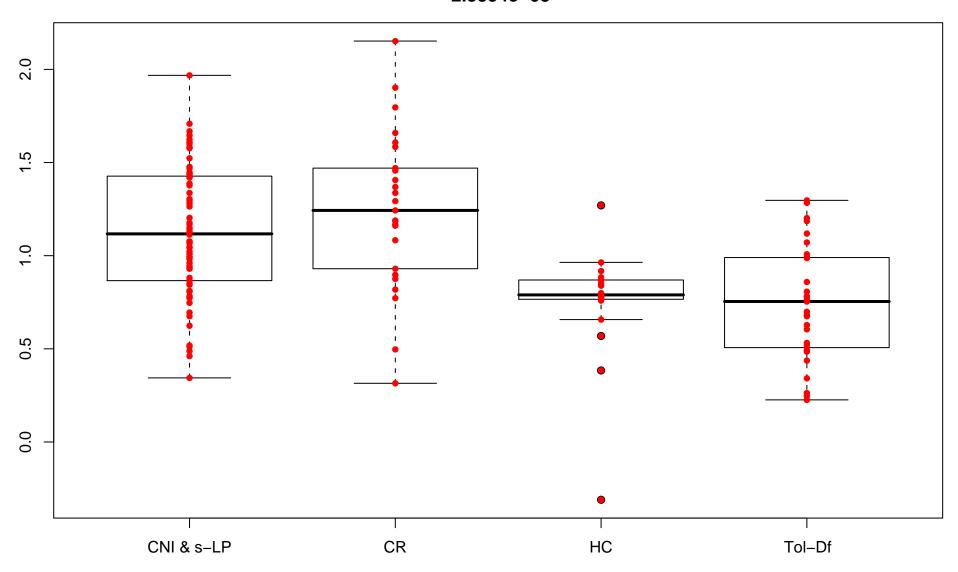
Rank 34: ENST00000360623 2.1058e-08



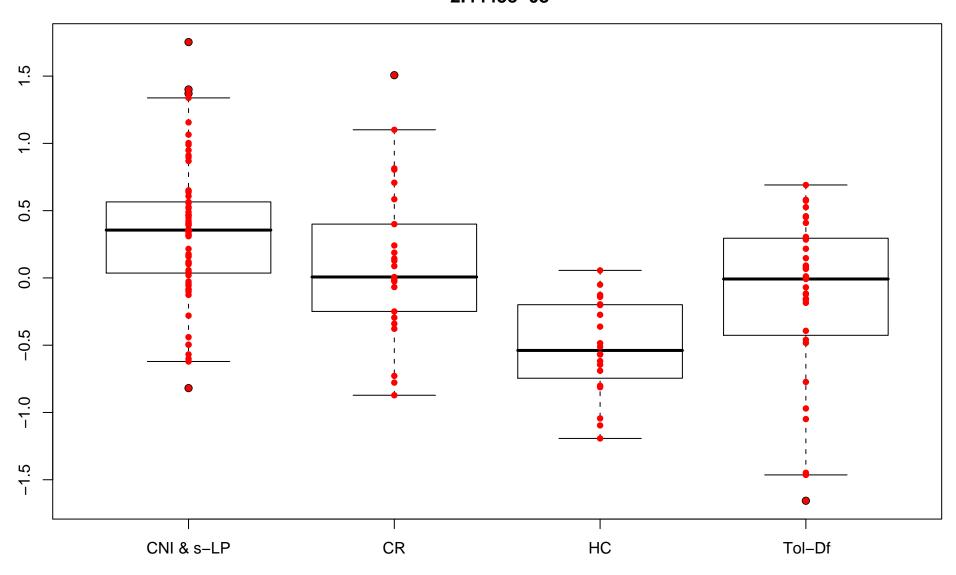
Rank 35: RPS6 2.2906e-08



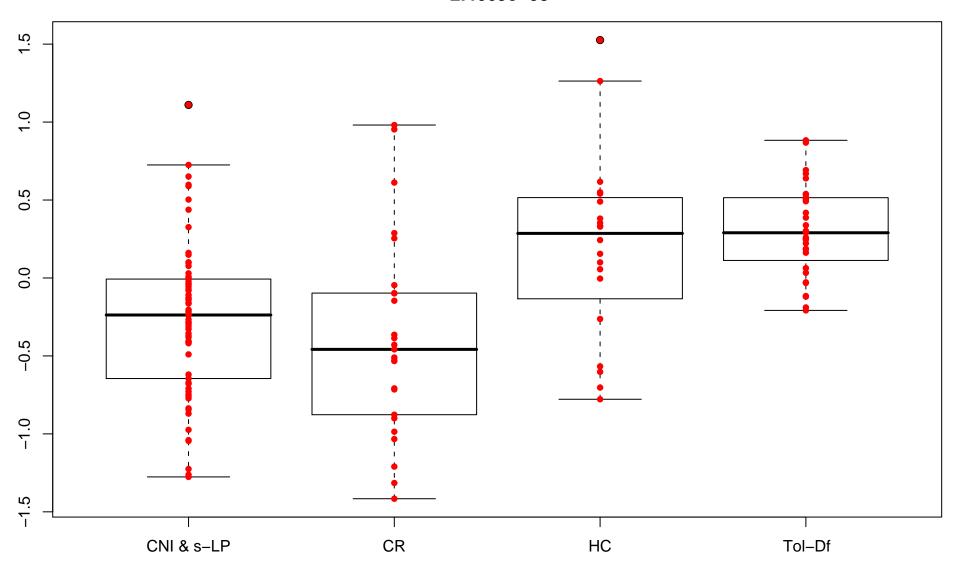
Rank 36 : SORT1 2.3354e-08



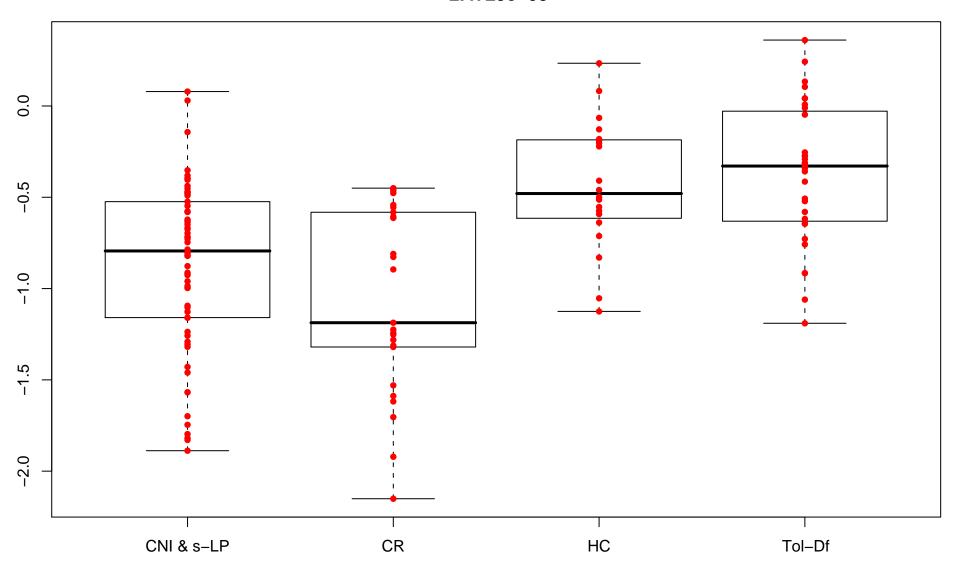
Rank 37 : KIAA0485 2.4445e-08



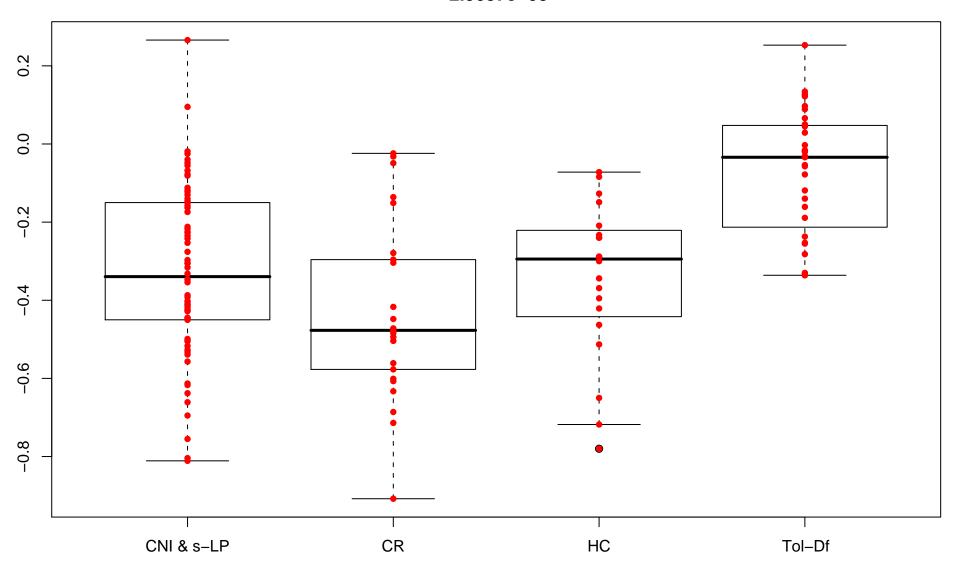
Rank 38 : ASB2 2.4669e-08



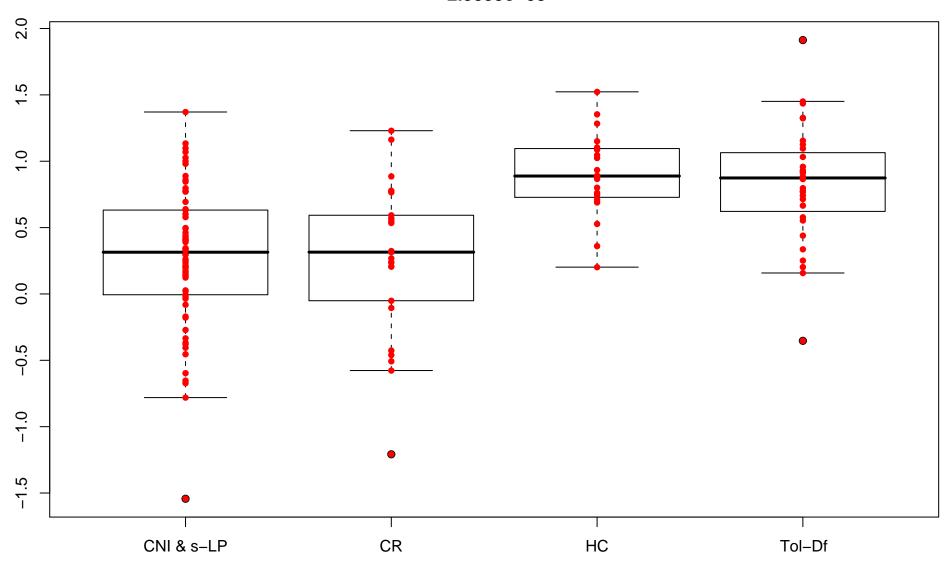
Rank 39: RPL9 2.4729e-08



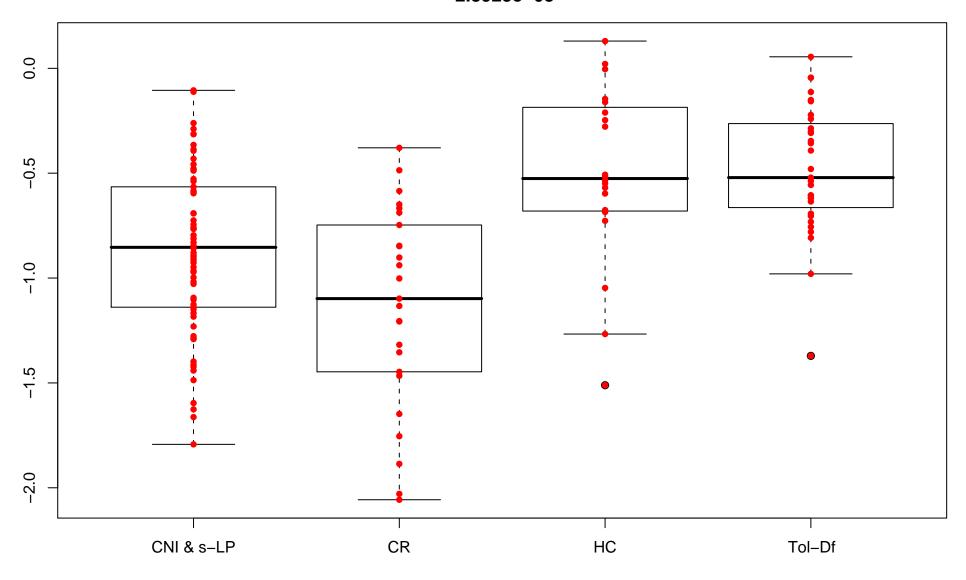
Rank 40 : BBS4 2.5037e-08



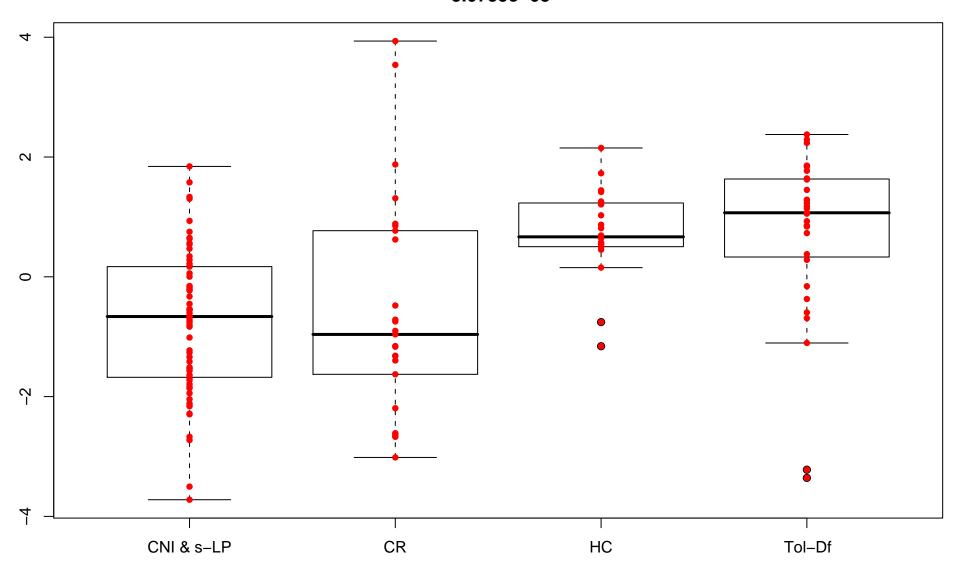
Rank 41 : EIF2AK3 2.5599e-08



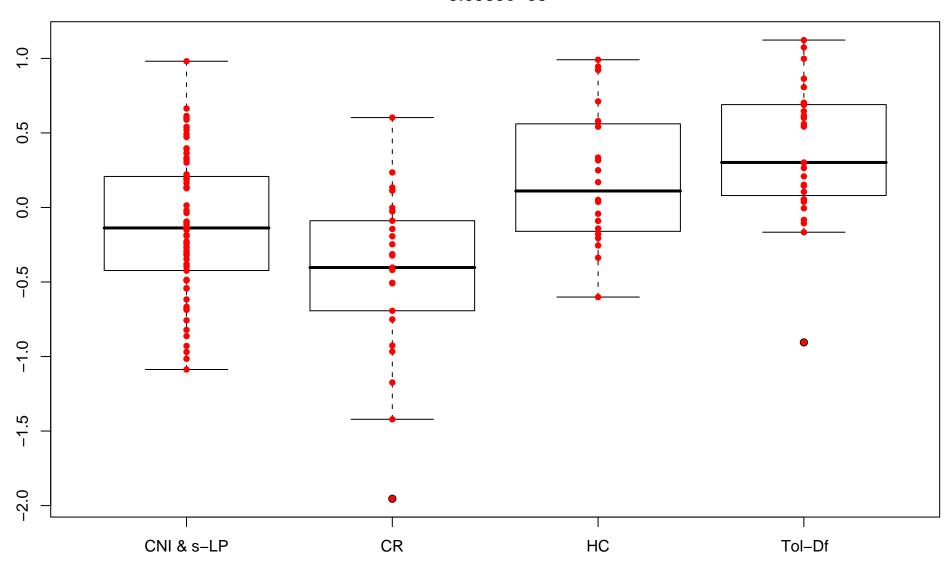
Rank 42 : CD48 2.8923e-08



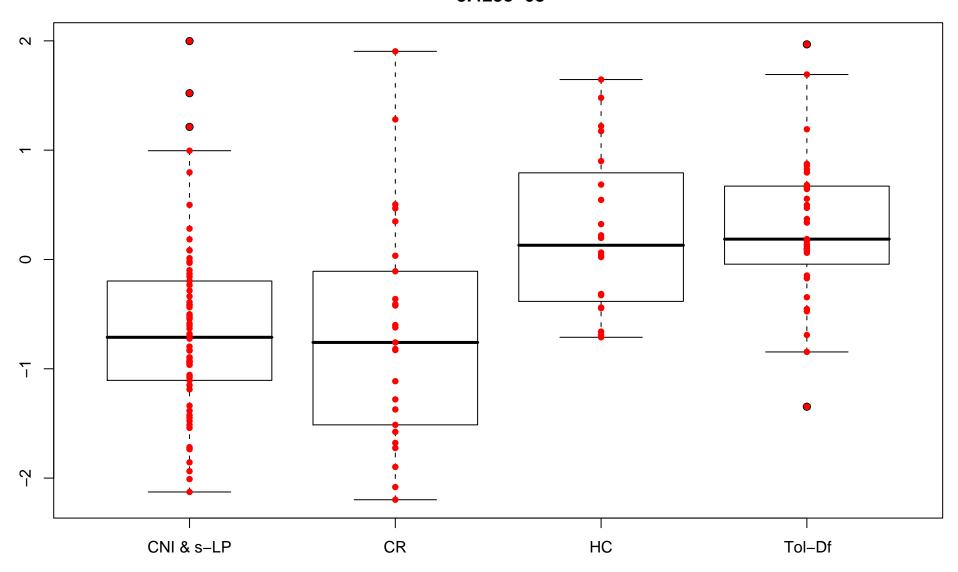
Rank 43: FCRL2 3.0755e-08



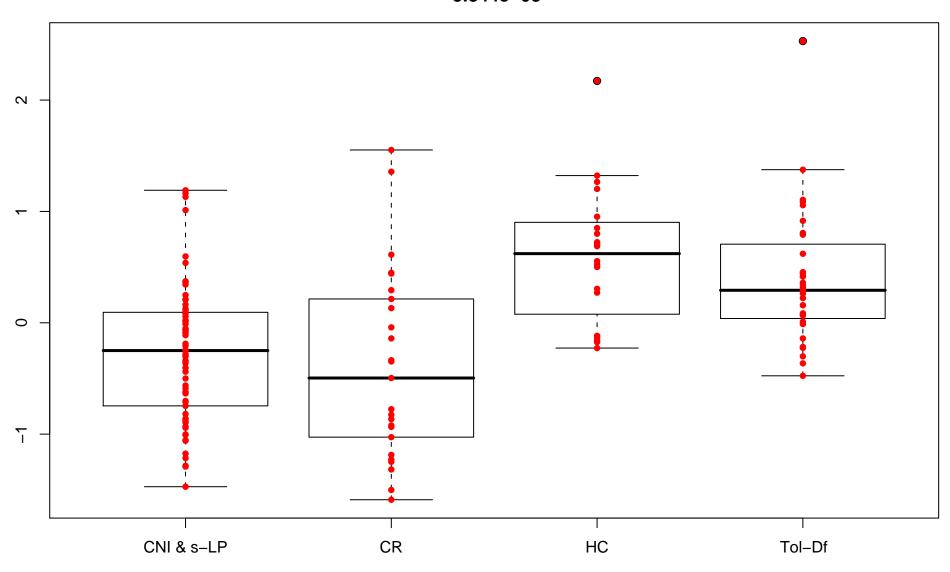
Rank 44 : DENND2D 3.0983e-08



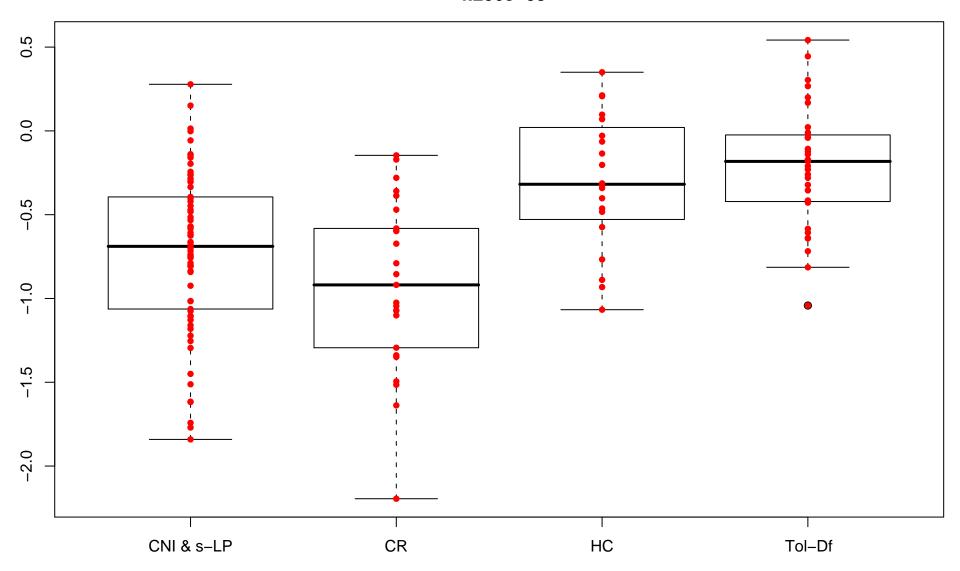
Rank 45 : IGLL3 3.423e-08



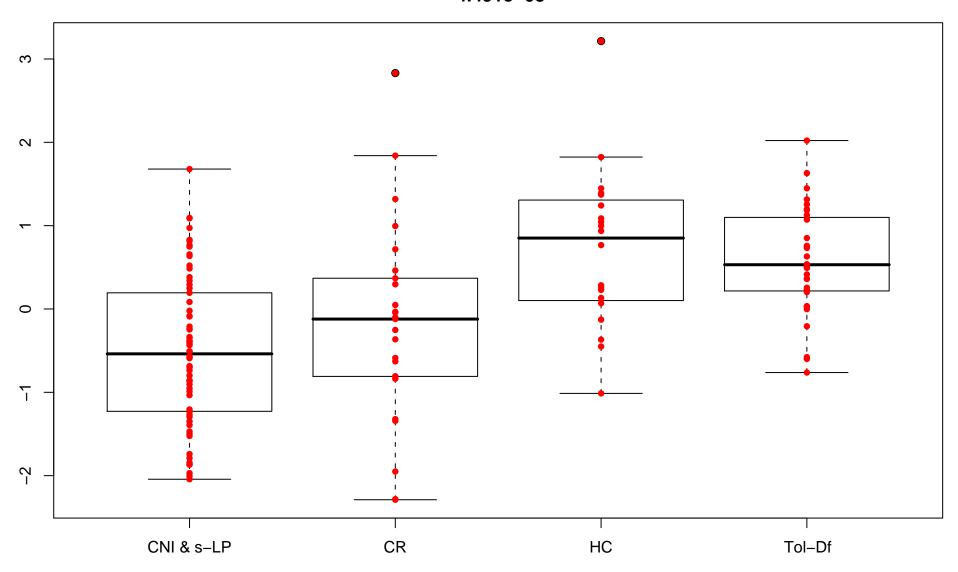
Rank 46: PMP22 3.844e-08



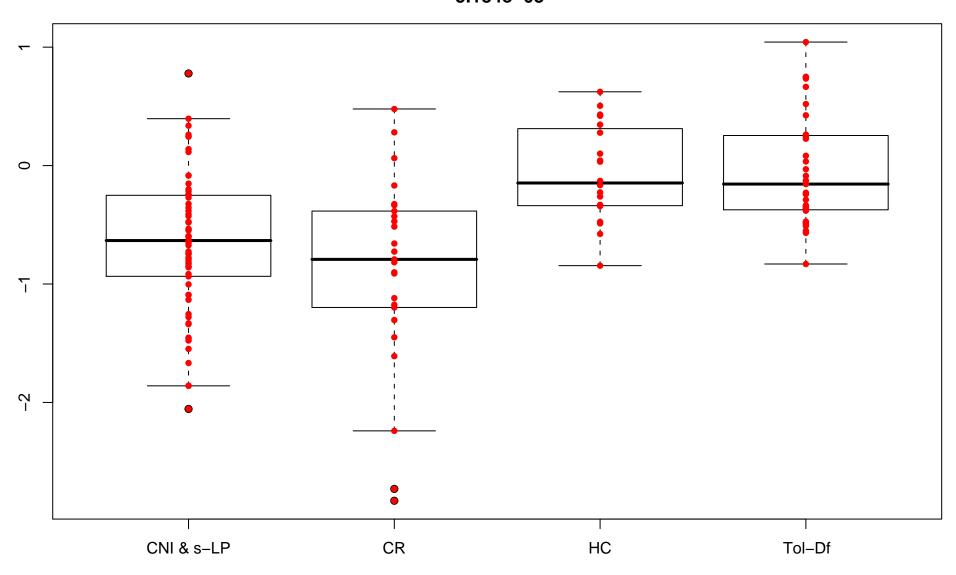
Rank 47 : HINT1 4.206e-08



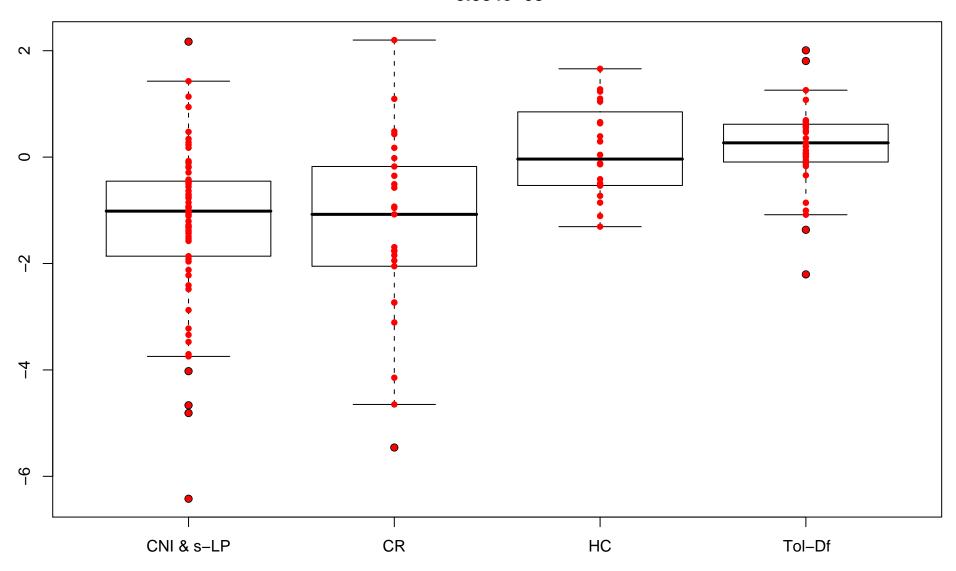
Rank 48 : FANK1 4.491e-08



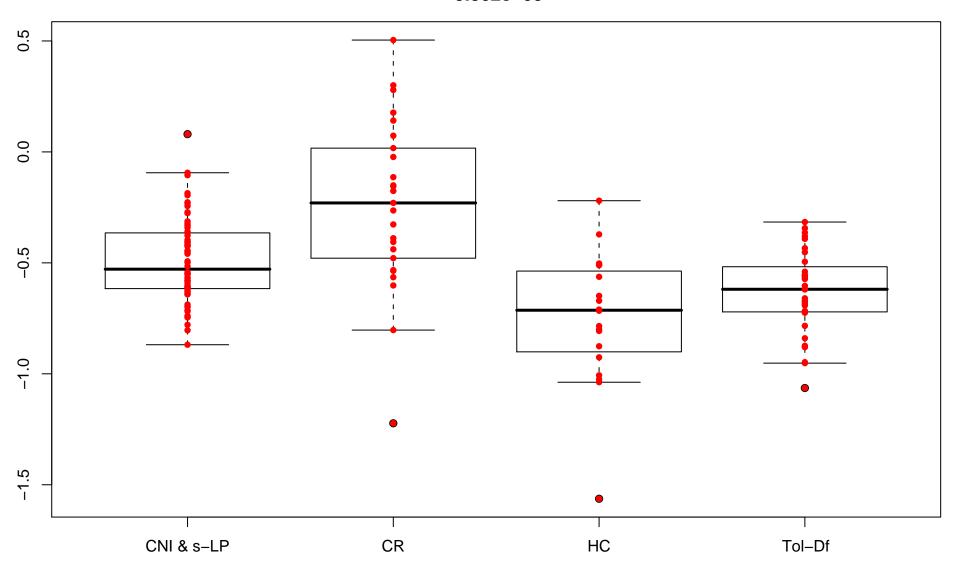
Rank 49: RHOH 5.184e-08



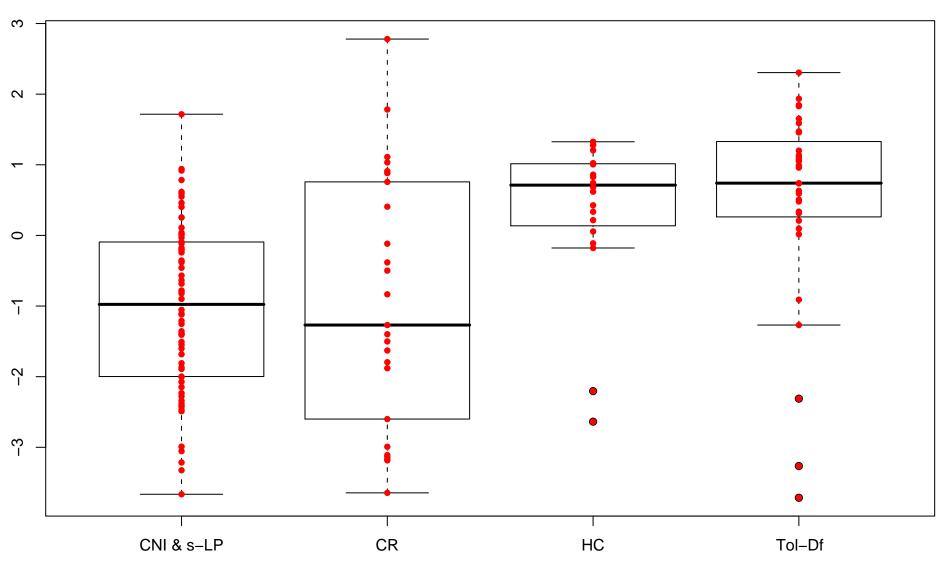
Rank 50 : IGLC 5.384e-08



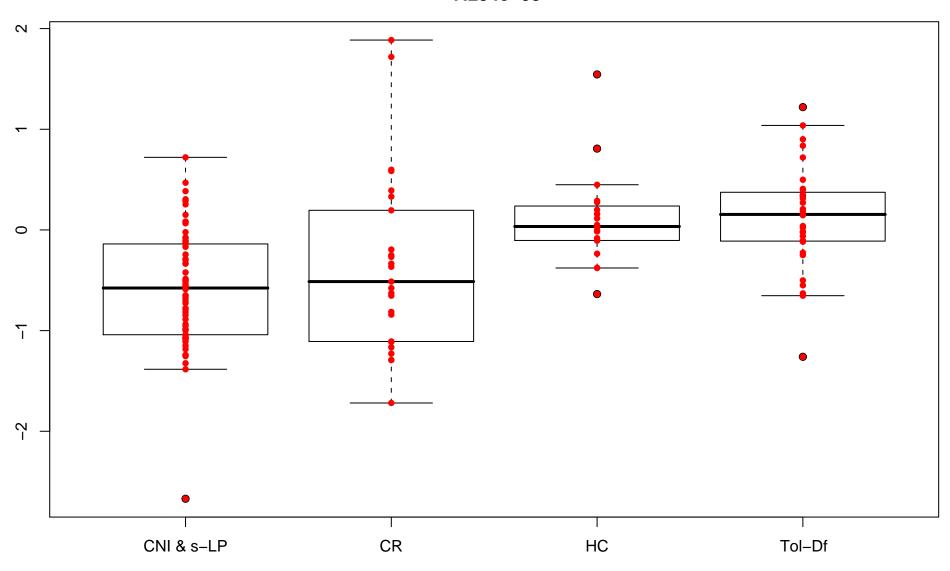
Rank 51 : ATL3 5.802e-08



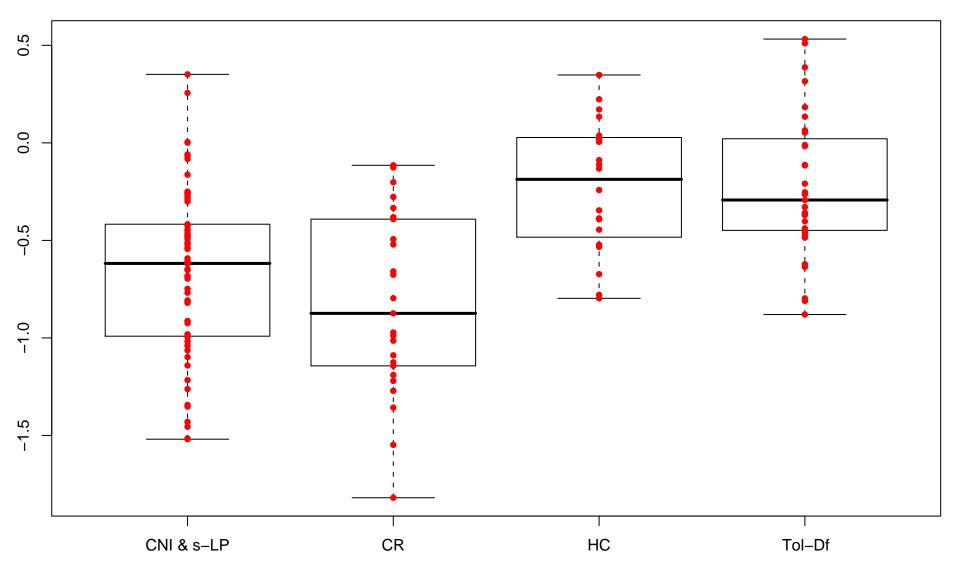
Rank 52: THC2438936 7.053e-08



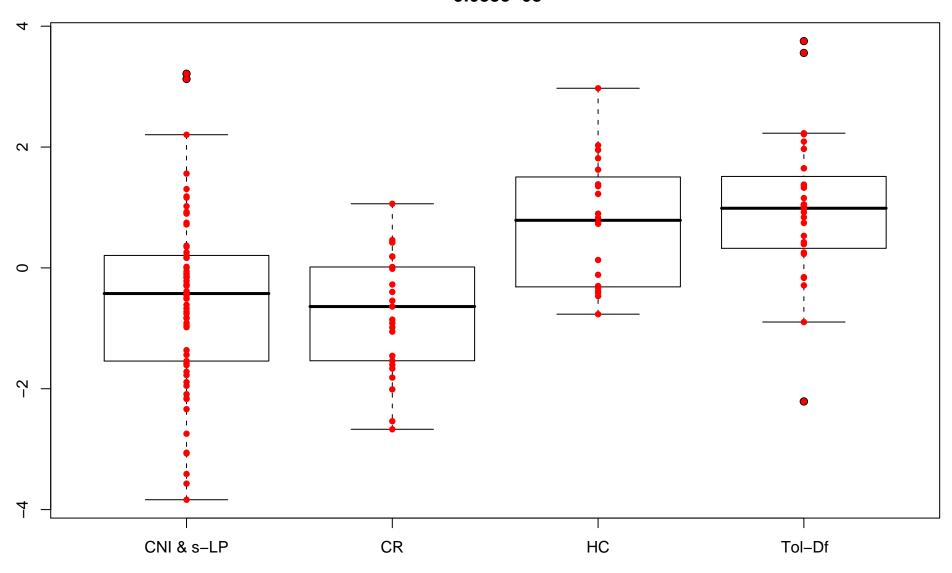
Rank 53 : PNOC 7.254e-08



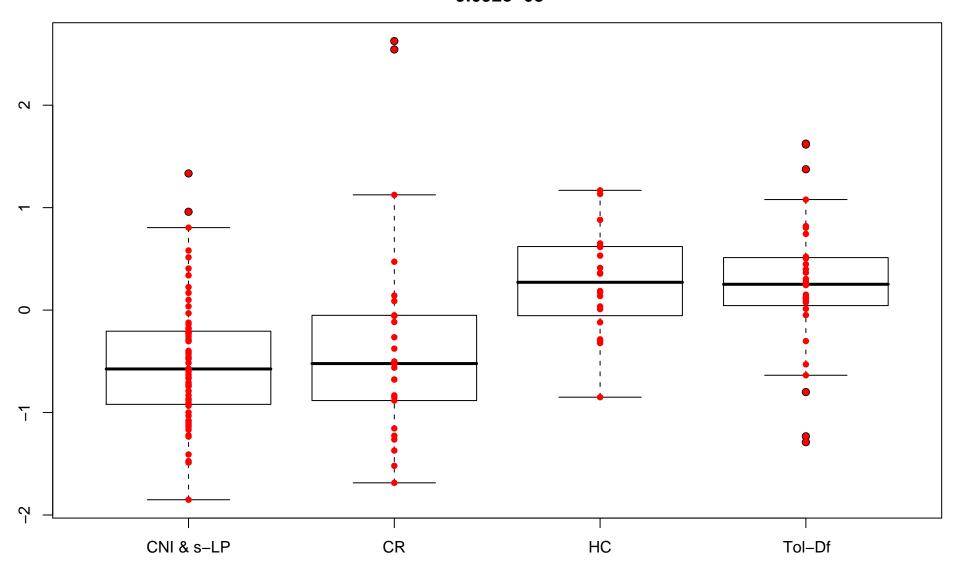
Rank 54: LOC100131323 8.289e-08



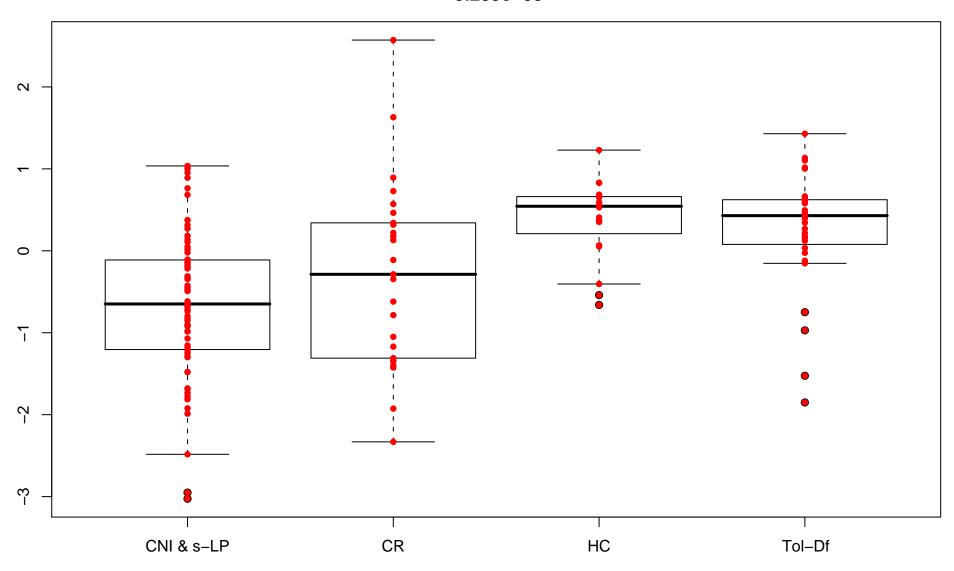
Rank 55 : IGHG1;IGHG2;IGHG3;IGHG4 9.033e-08



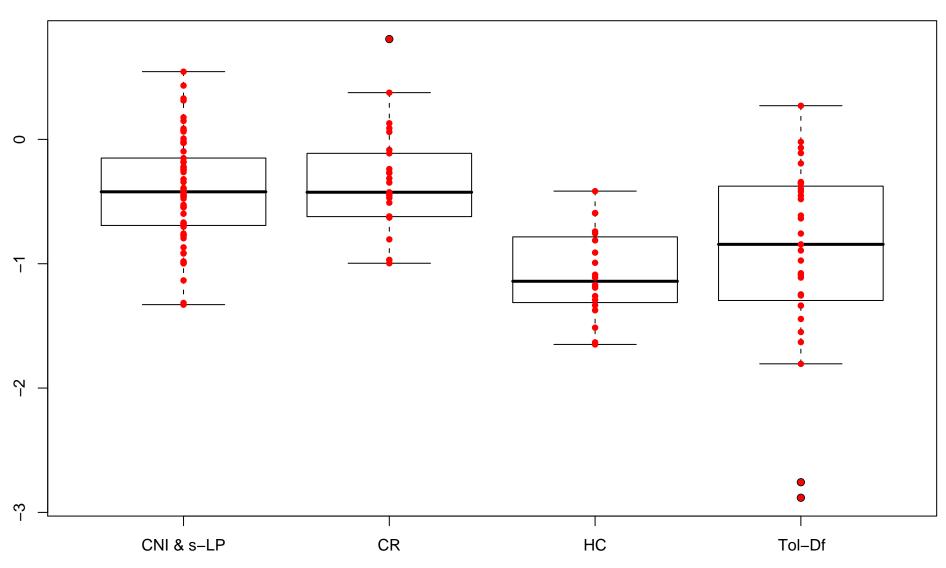
Rank 56 : FCRLA 9.092e-08



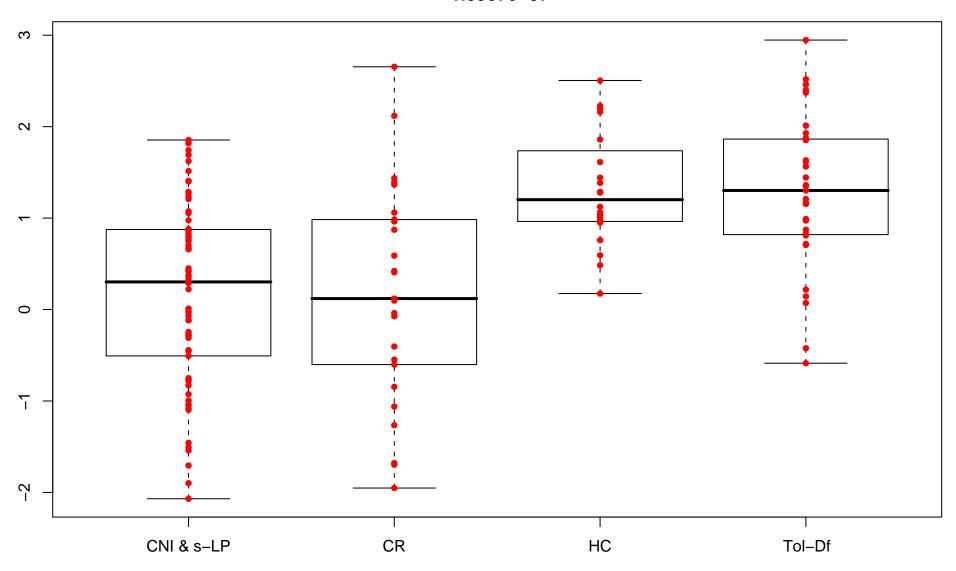
Rank 57: MS4A1 9.259e-08



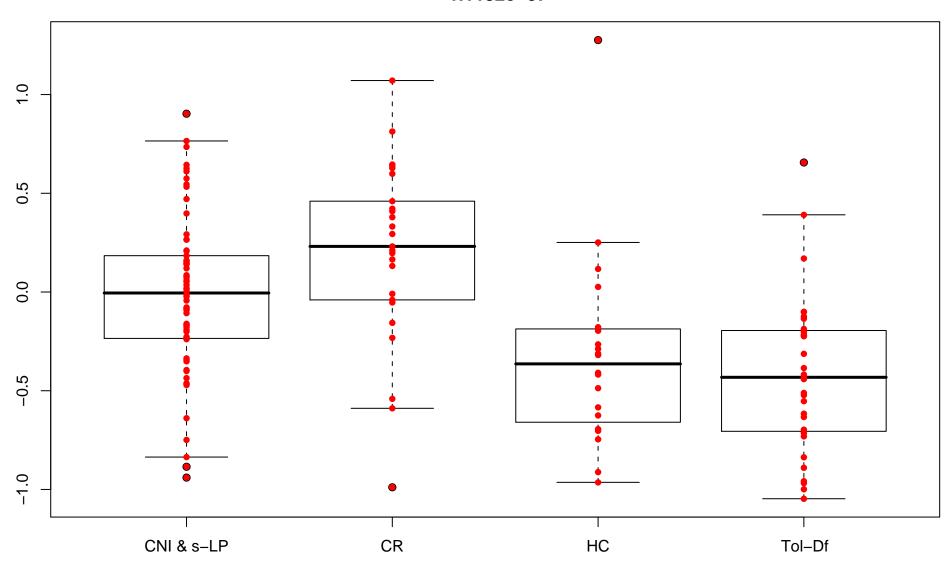
Rank 58: TMEM49 9.328e-08



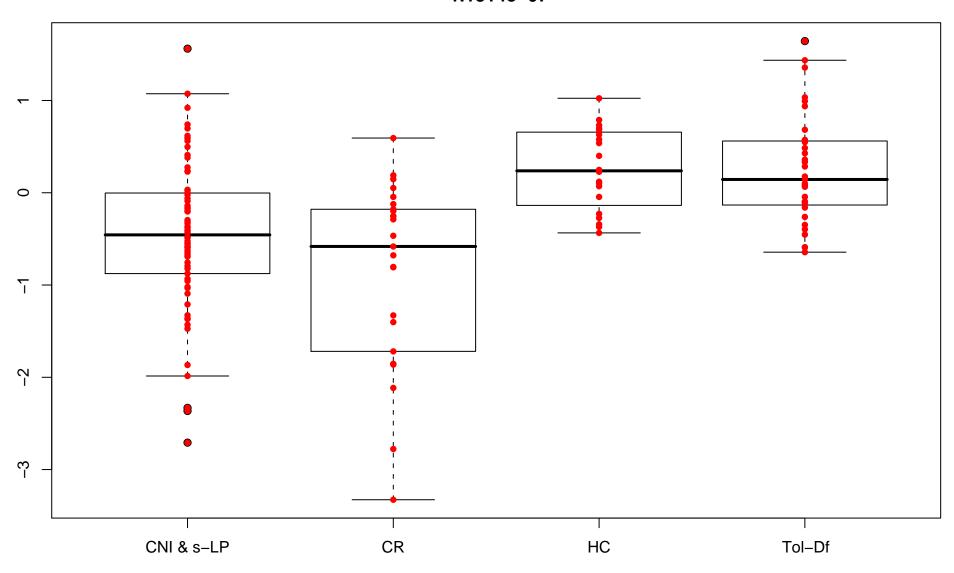
Rank 59 : BCL7A 1.0907e-07



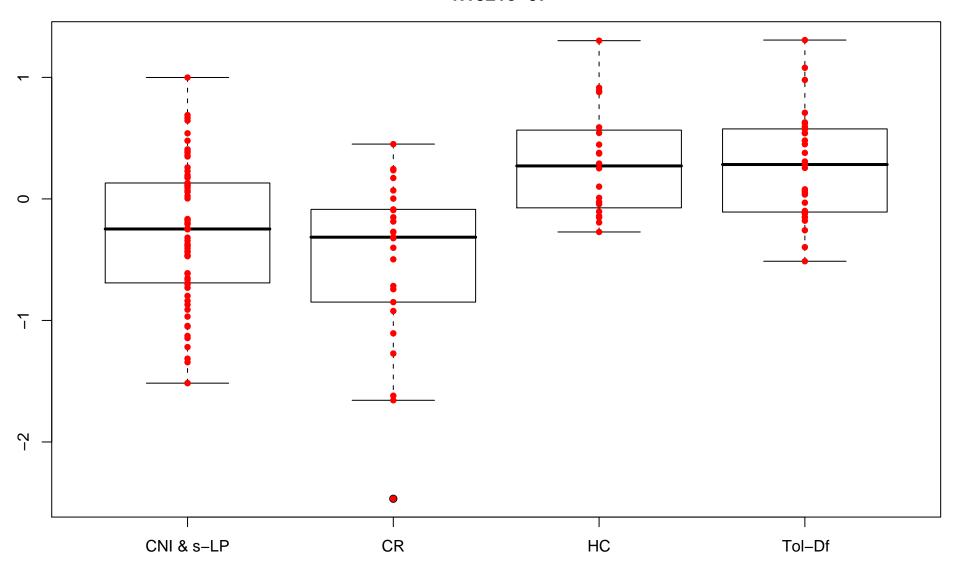
Rank 60 : PLXDC2 1.1132e-07



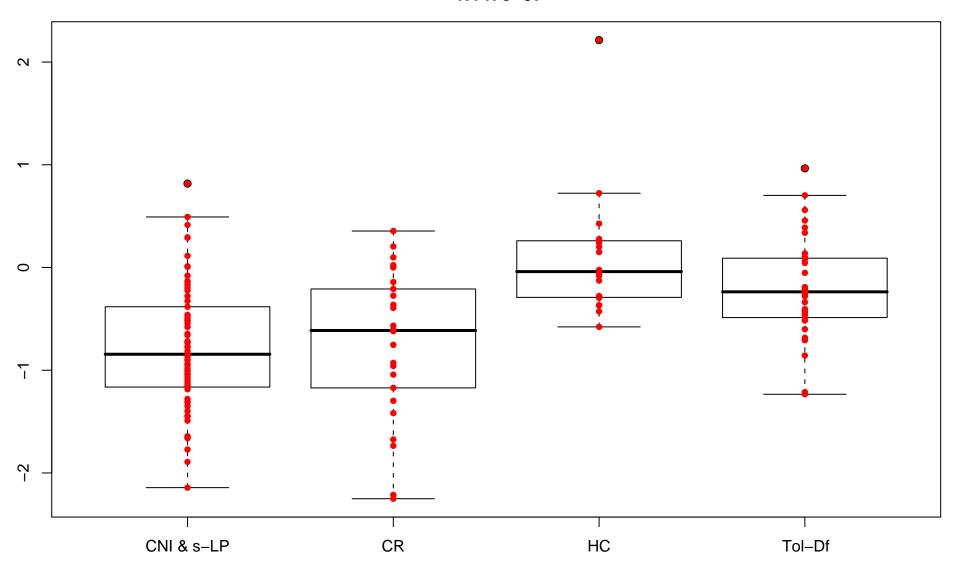
Rank 61: CD28 1.1314e-07



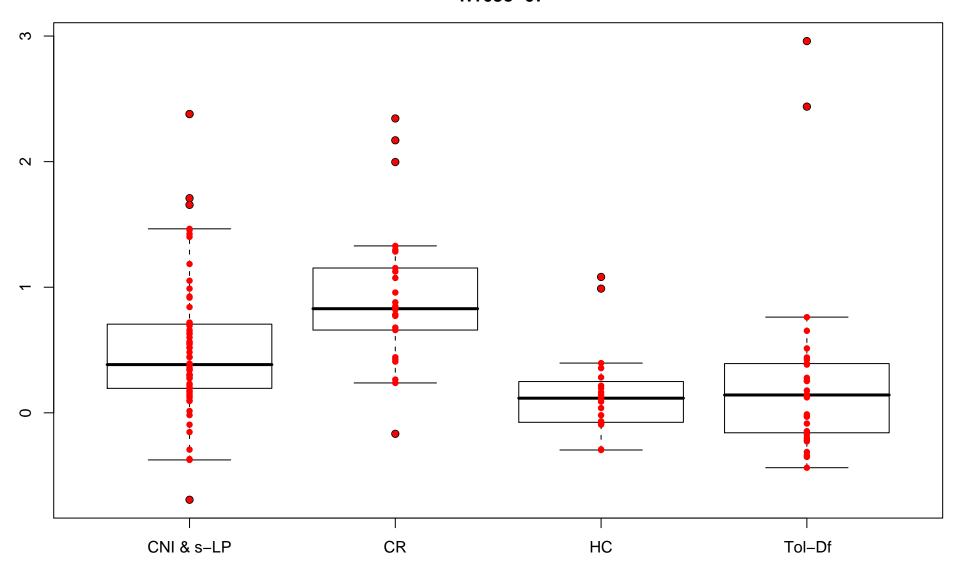
Rank 62: SLAMF1 1.1321e-07



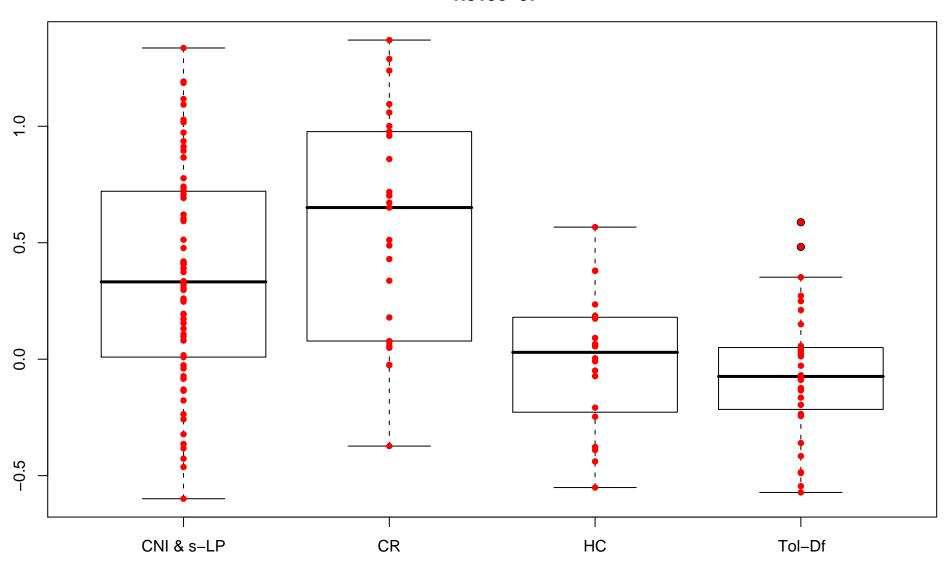
Rank 63: DNASE1L3 1.147e-07



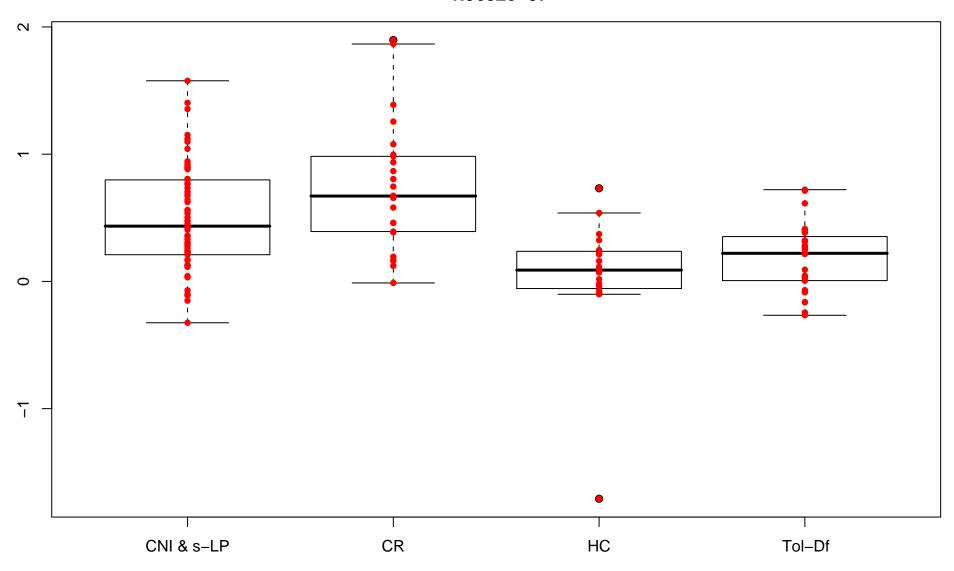
Rank 64: FN1 1.163e-07



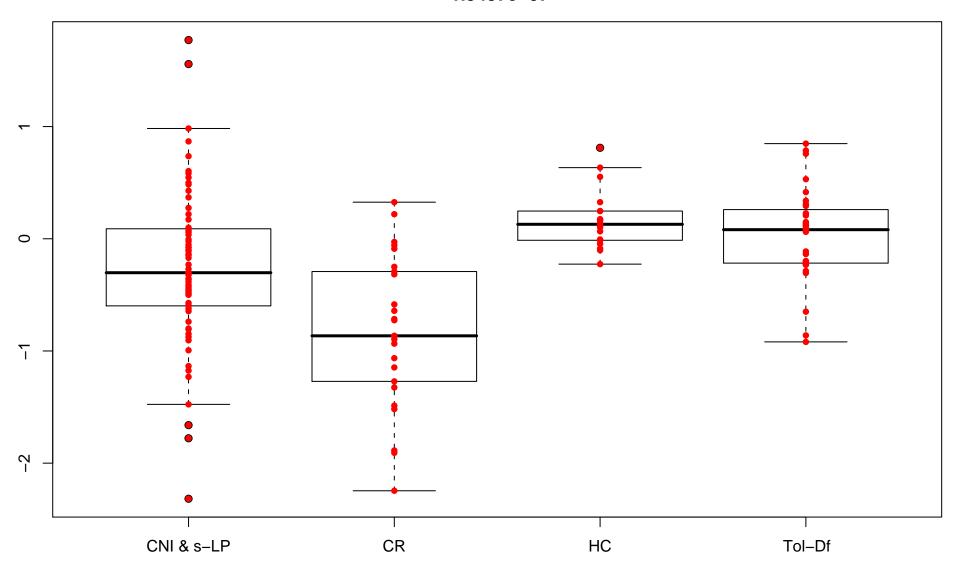
Rank 65 : LHFPL2 1.319e-07



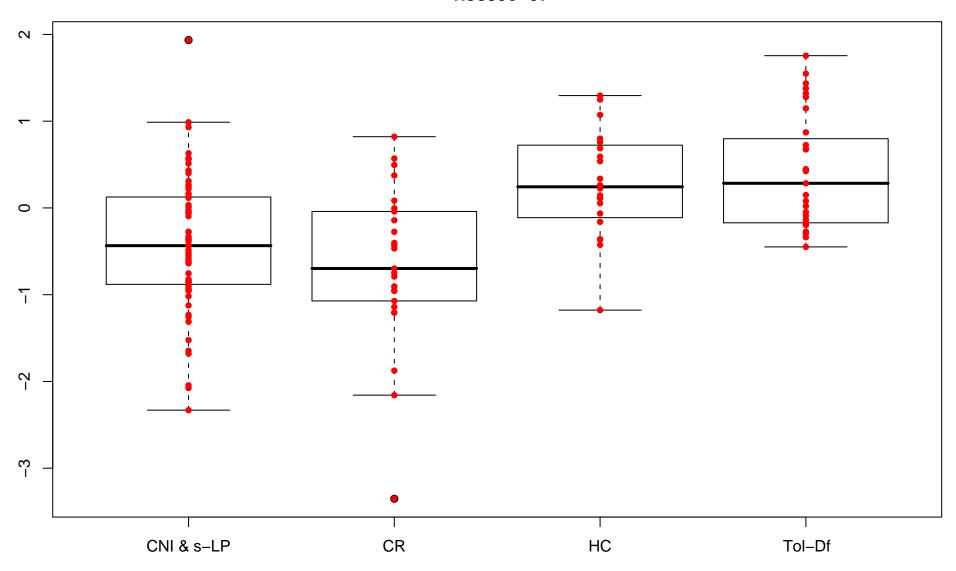
Rank 66 : SPTLC2 1.3632e-07



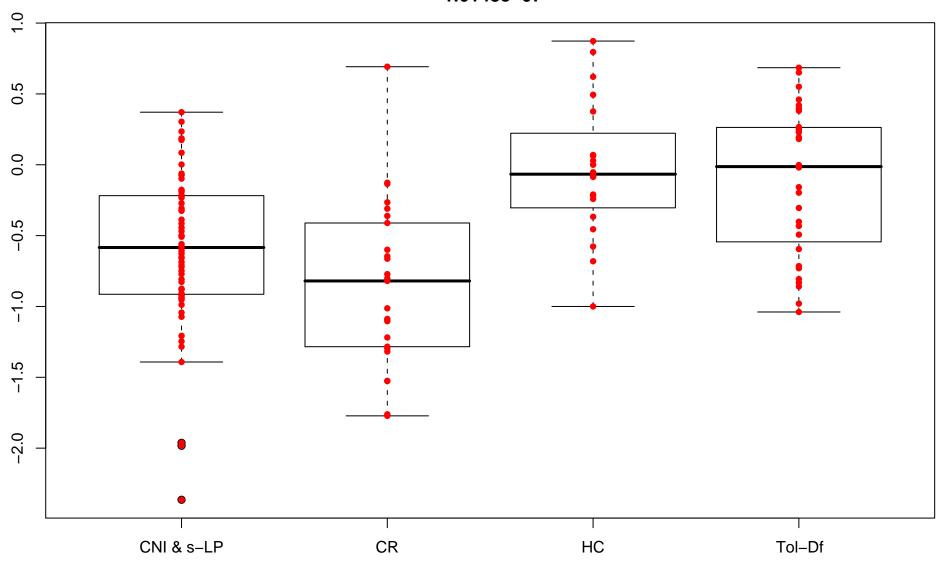
Rank 67 : IKZF2 1.5457e-07



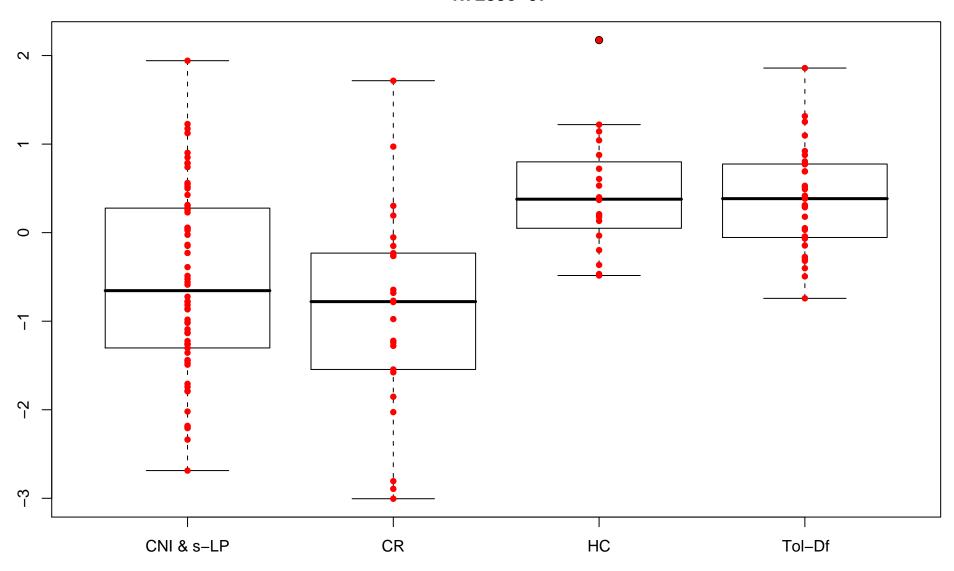
Rank 68: DPP4 1.5835e-07



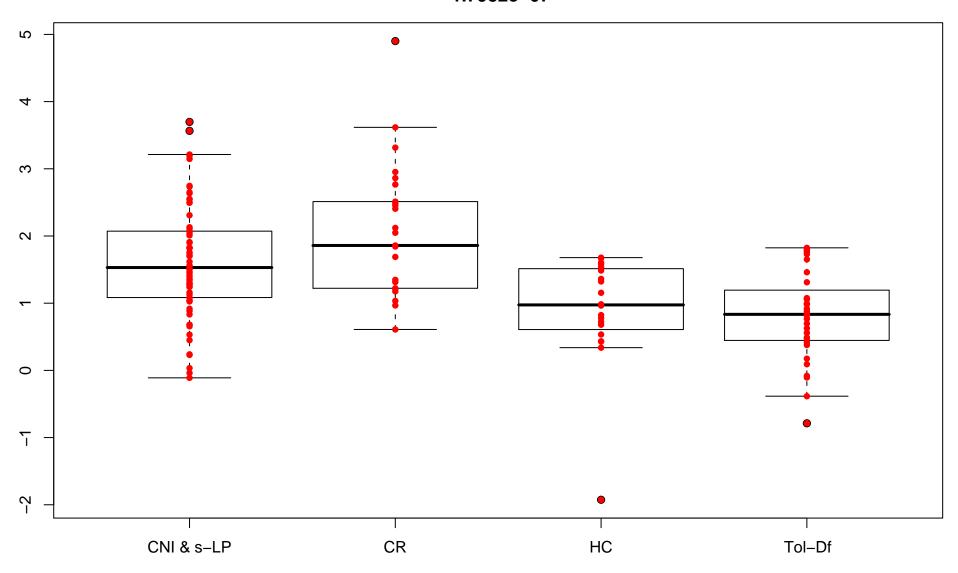
Rank 69 : KLRB1 1.6148e-07



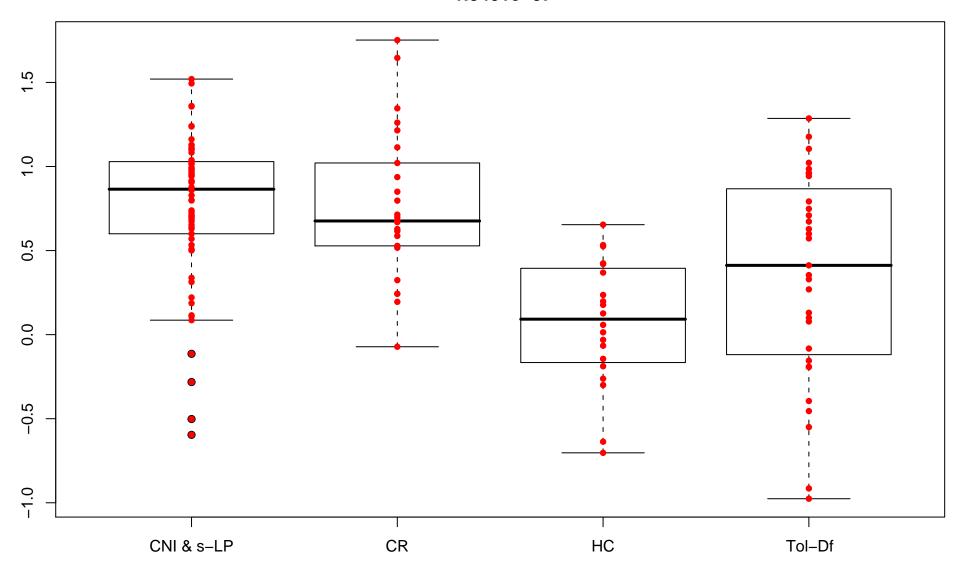
Rank 70: IL2RA 1.7285e-07



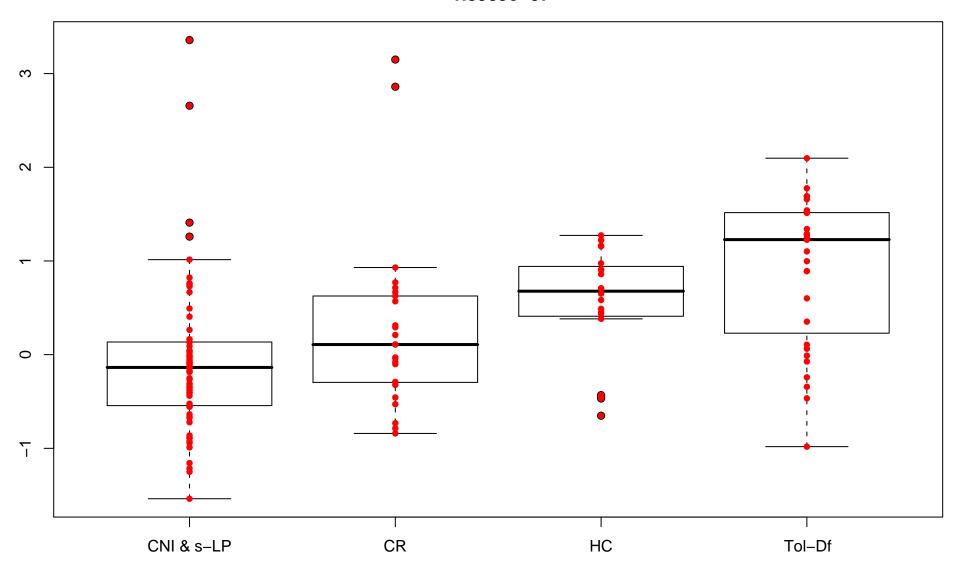
Rank 71 : SPTA1 1.7982e-07



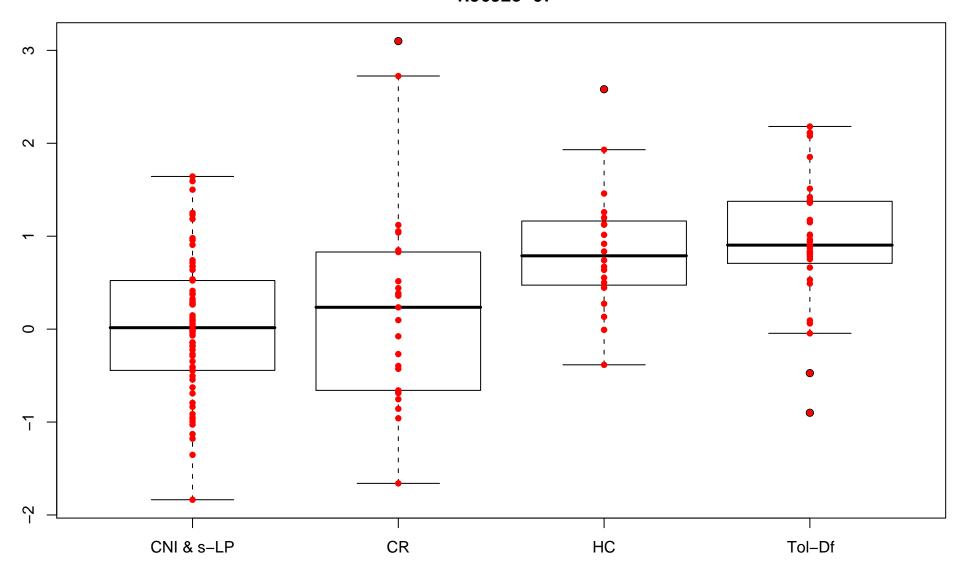
Rank 72 : AK129547 1.8401e-07



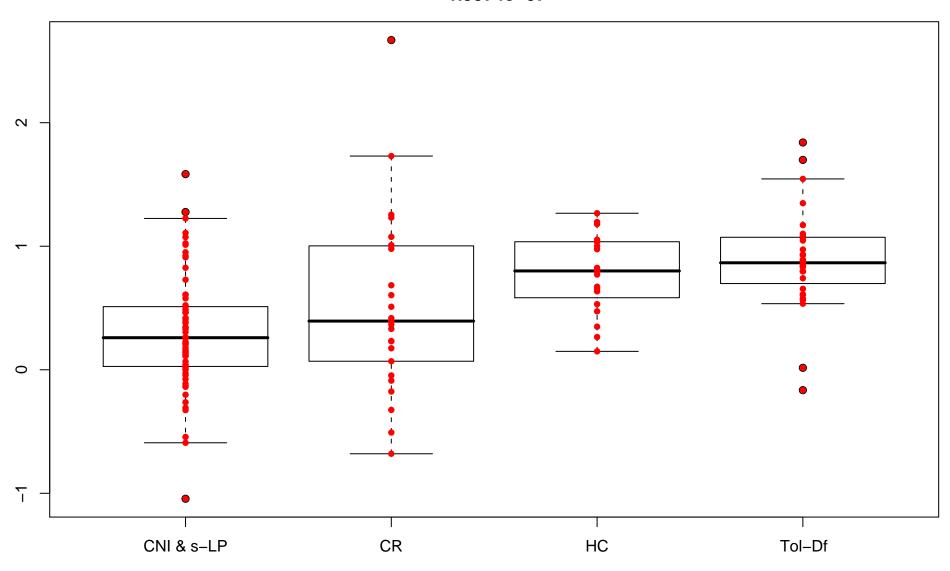
Rank 73: FCER2 1.8989e-07



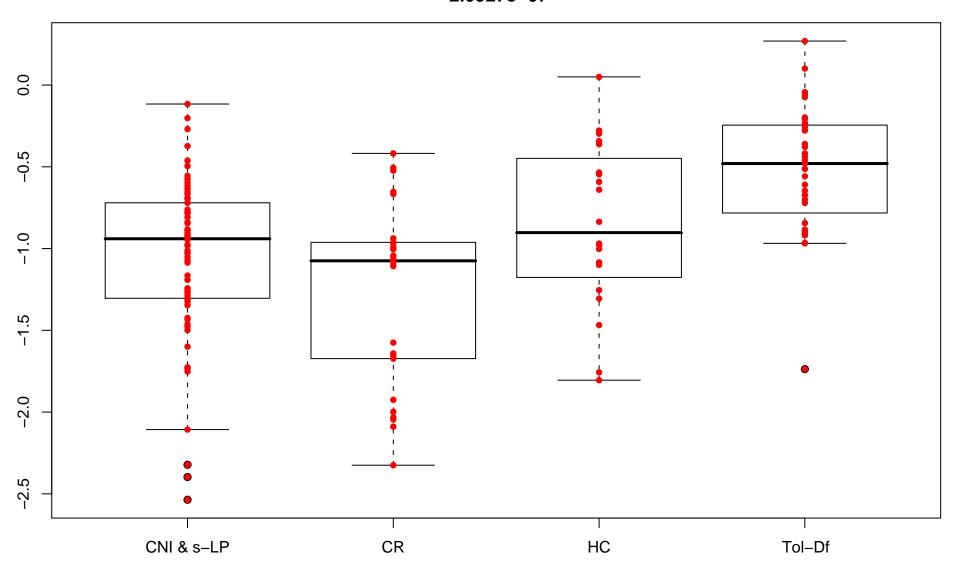
Rank 74: HLA-DOA 1.9692e-07



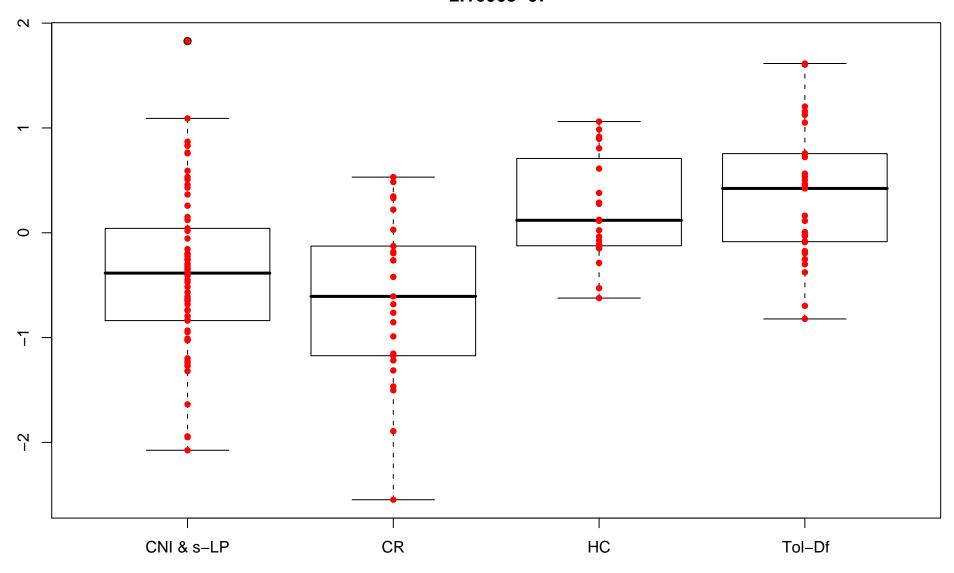
Rank 75 : SWAP70 1.9974e-07



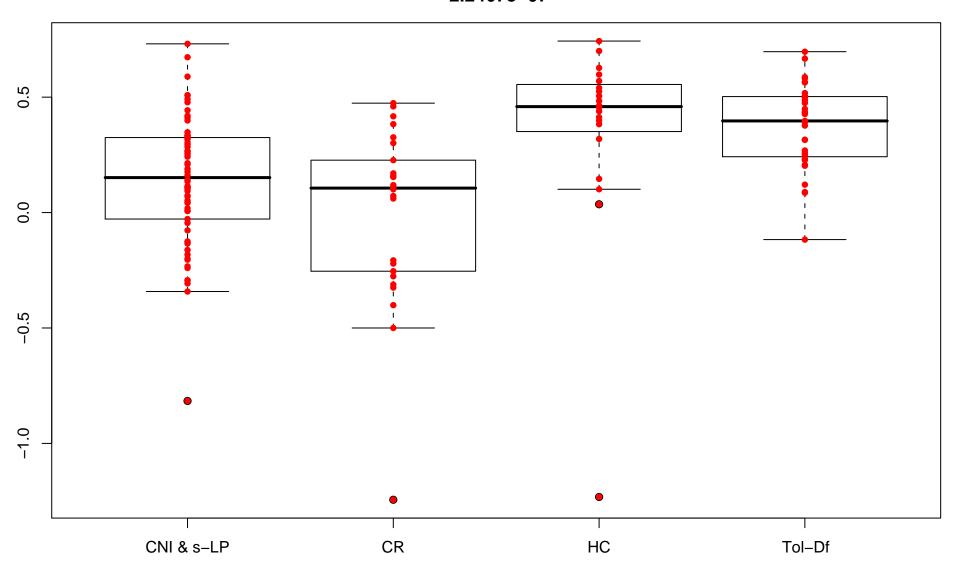
Rank 76 : PLEKHA1 2.0927e-07



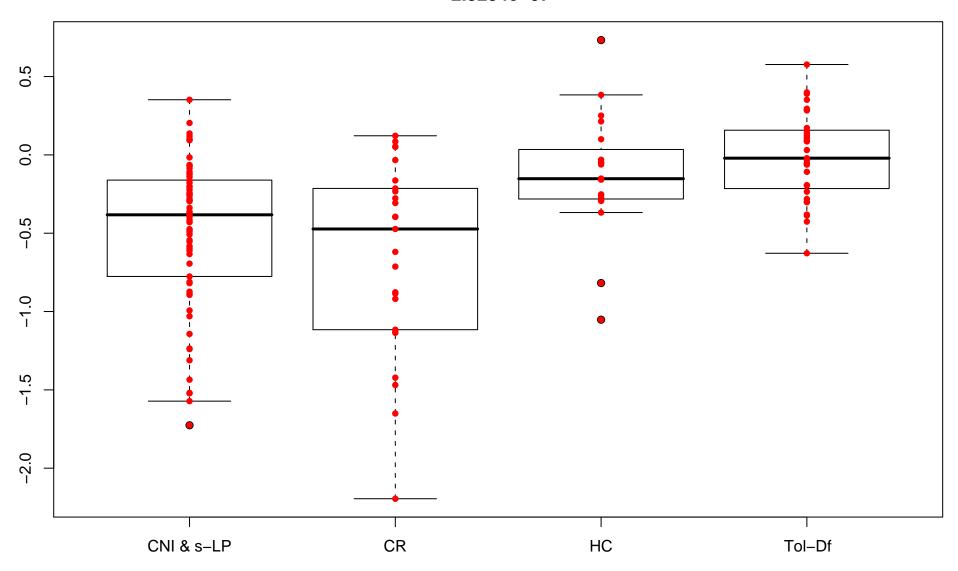
Rank 77 : LDHB 2.1606e-07



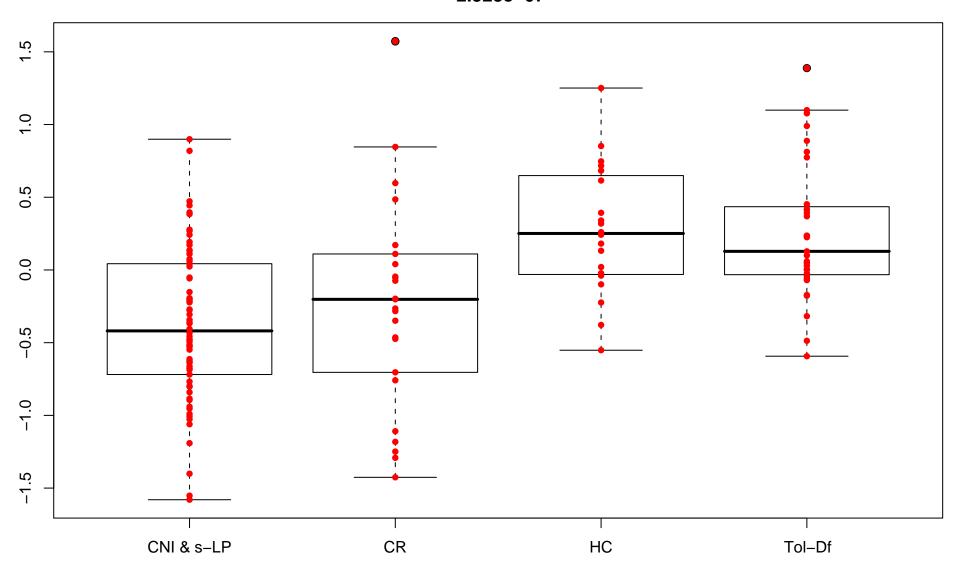
Rank 78: TGDS 2.2467e-07



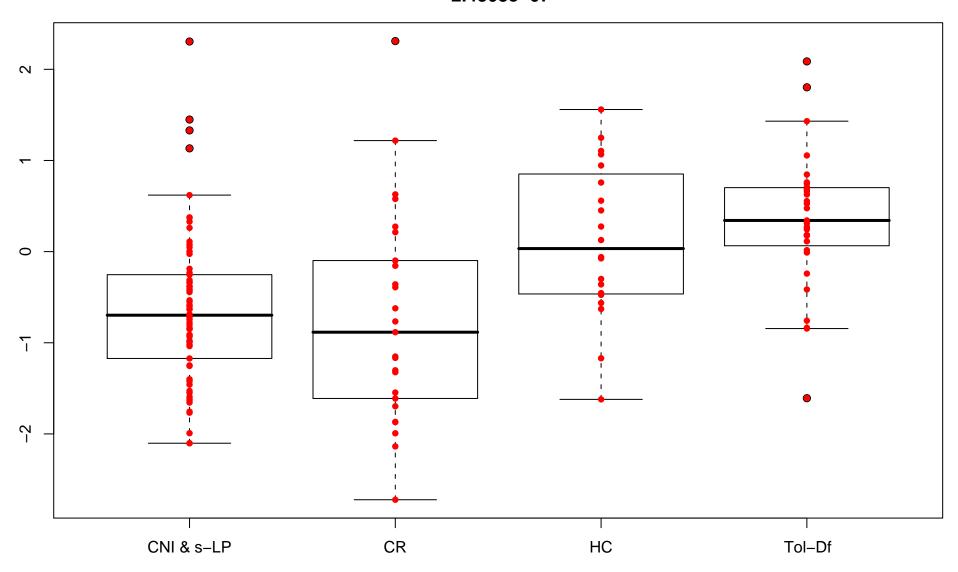
Rank 79: RPS27 2.3234e-07



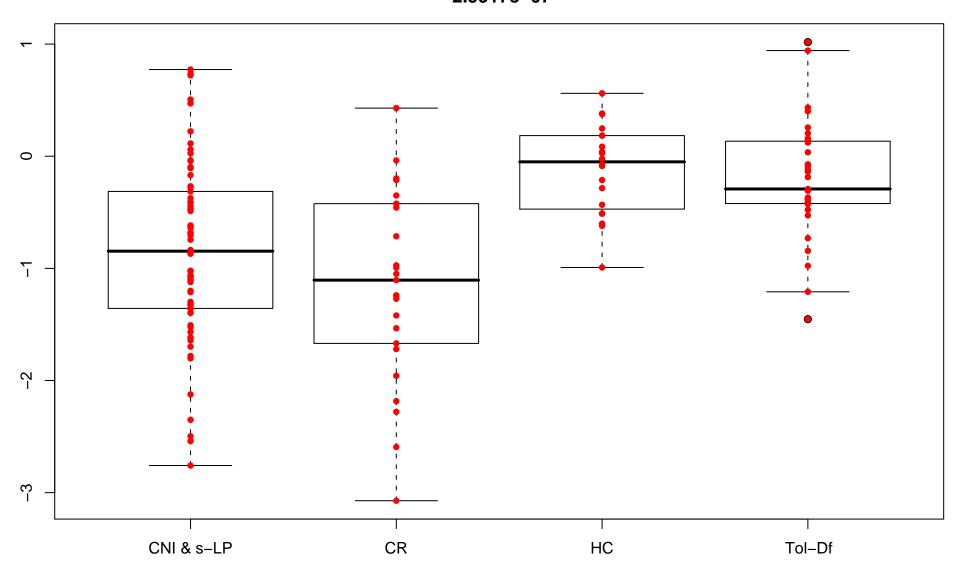
Rank 80 : TSPAN3 2.328e-07



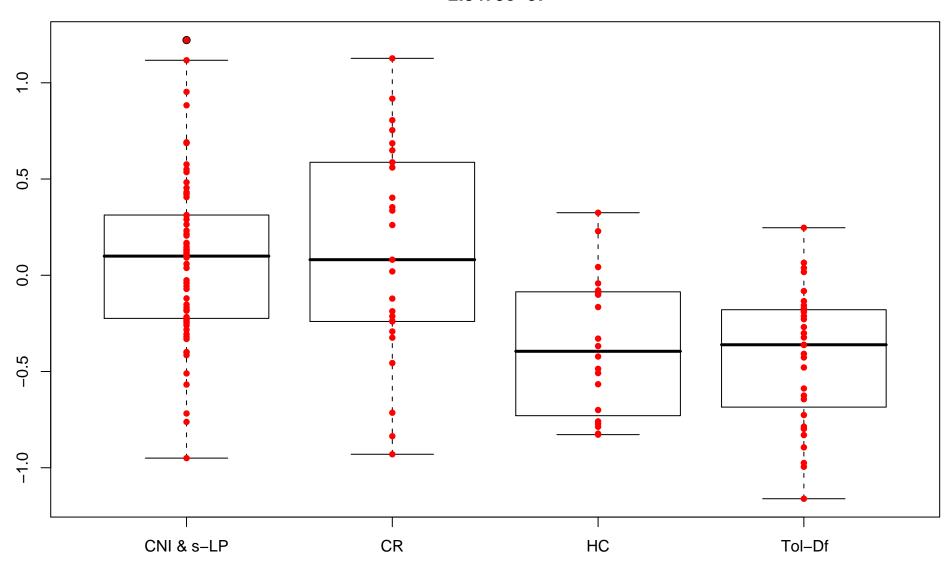
Rank 81 : IGLL1 2.4308e-07



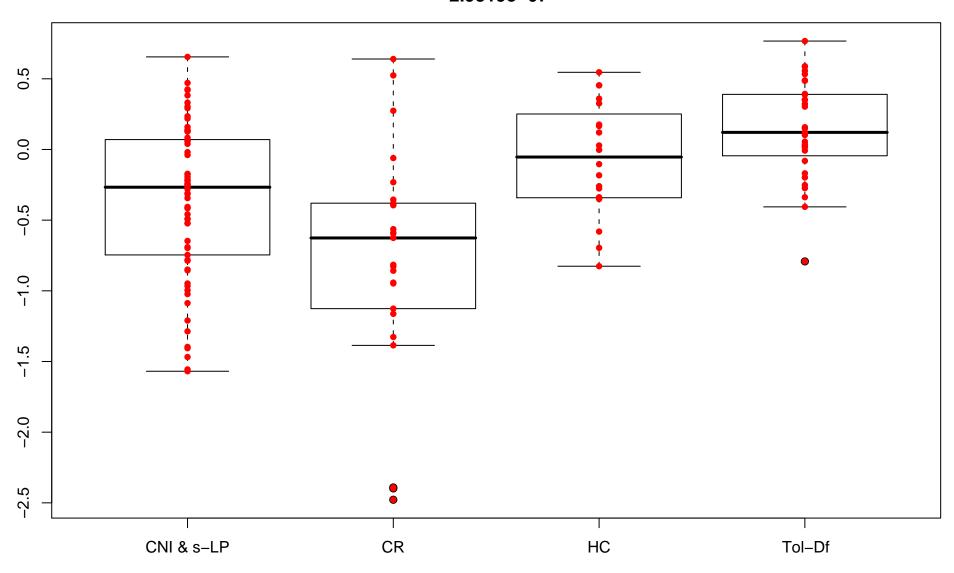
Rank 82 : EBI2 2.5917e-07



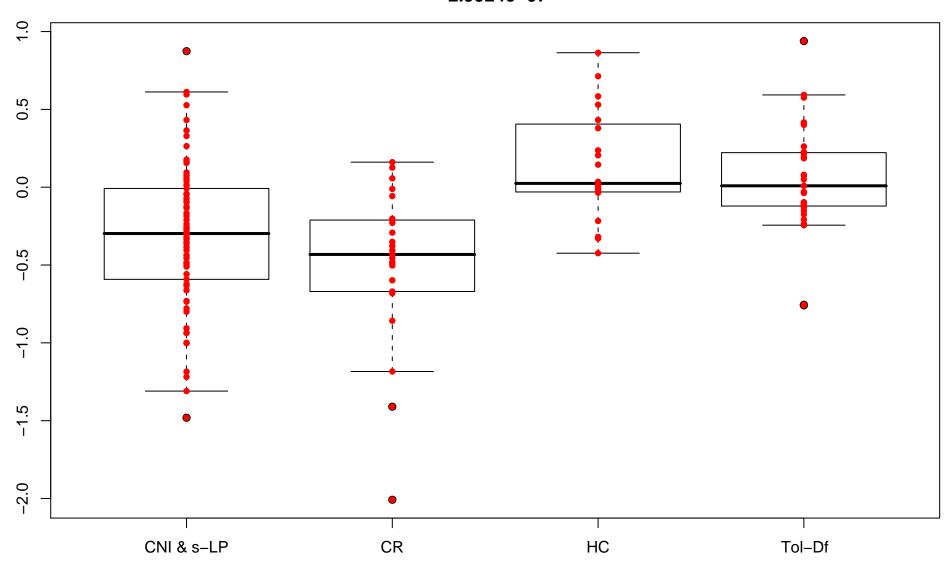
Rank 83 : SORT1 2.8479e-07



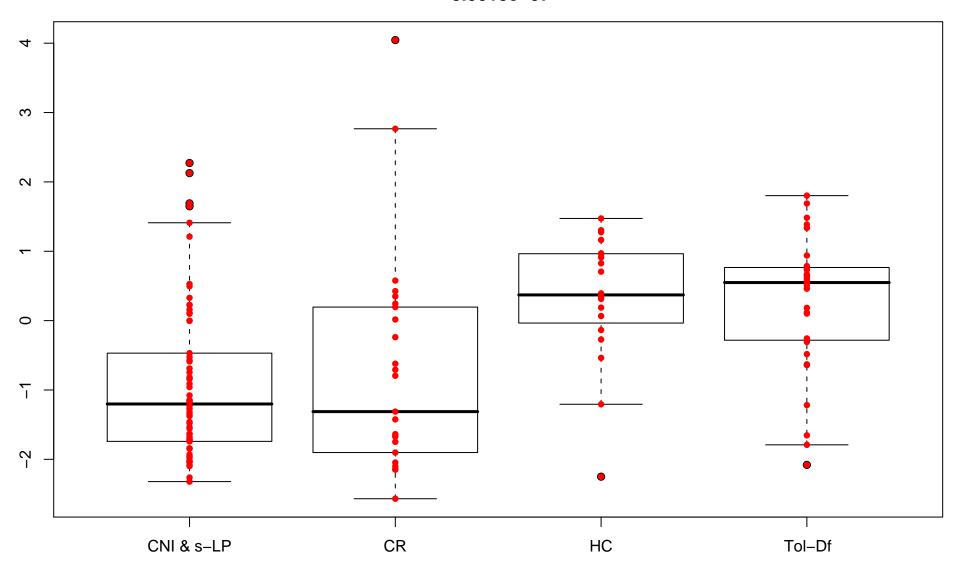
Rank 84: LAT 2.9319e-07



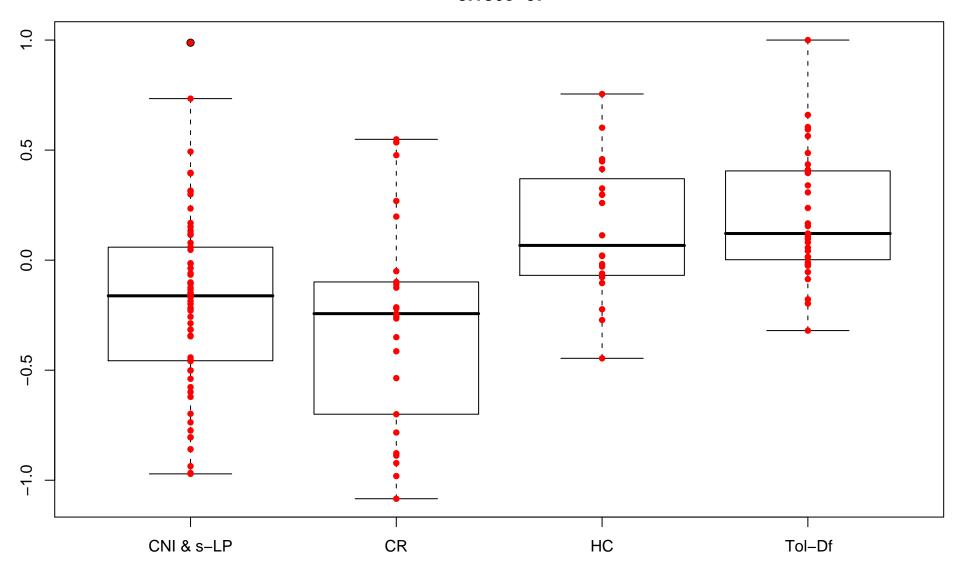
Rank 85 : BNIP3 2.9924e-07



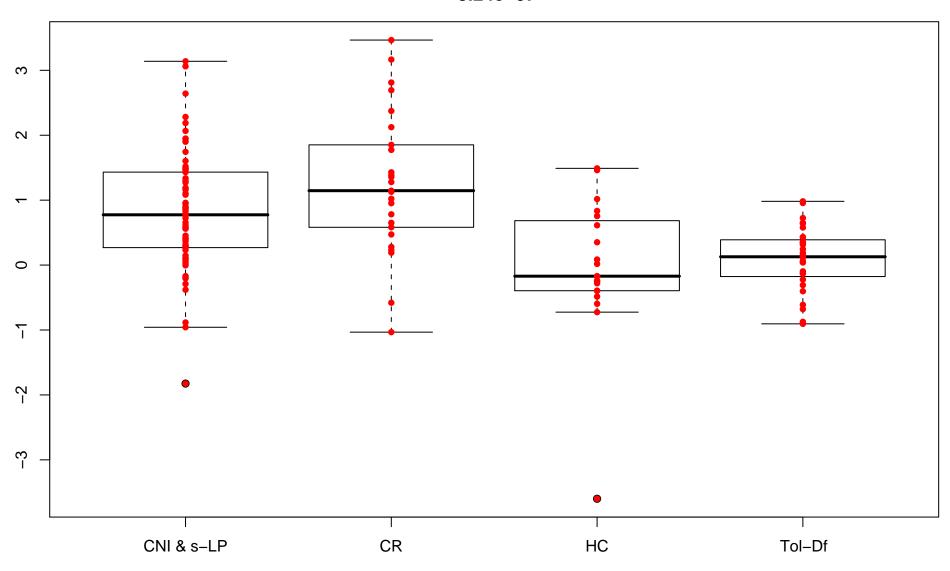
Rank 86 : MGC24039 3.0018e-07



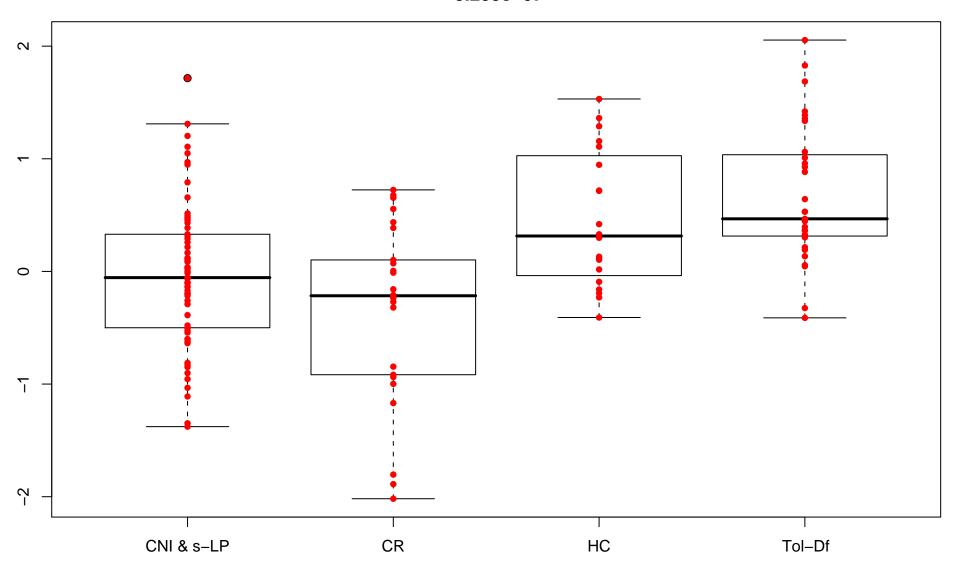
Rank 87: RFC4 3.186e-07



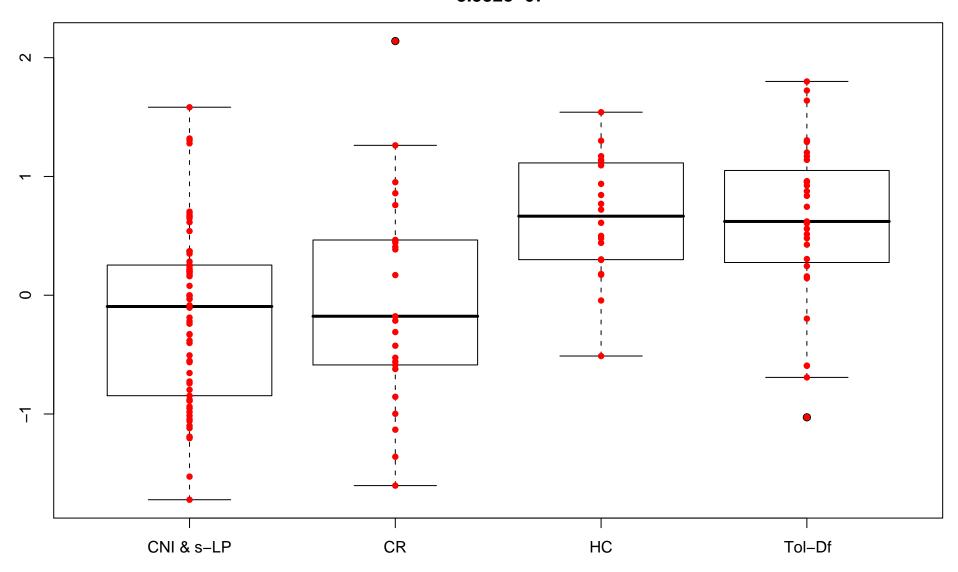
Rank 88 : NEDD4L 3.24e-07



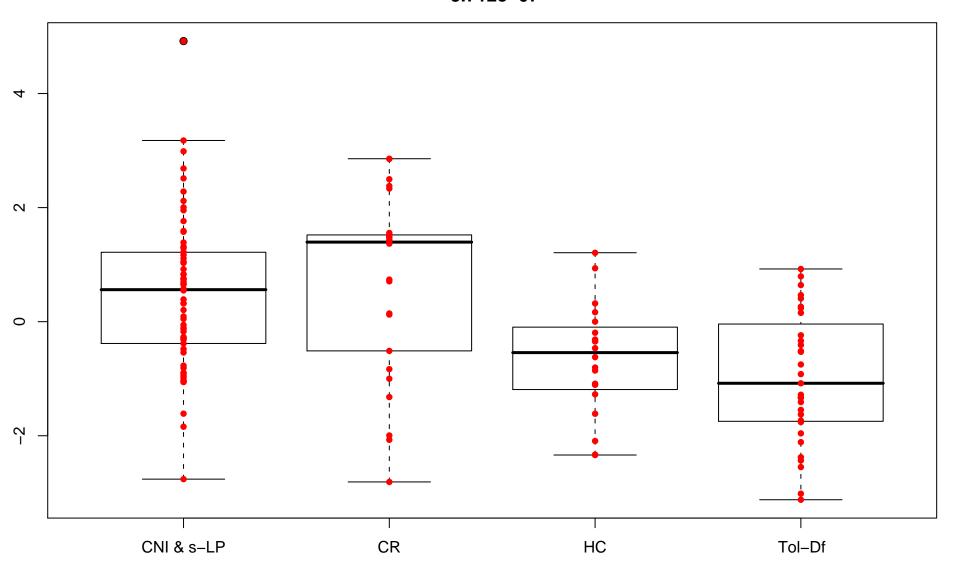
Rank 89 : ABLIM1 3.253e-07



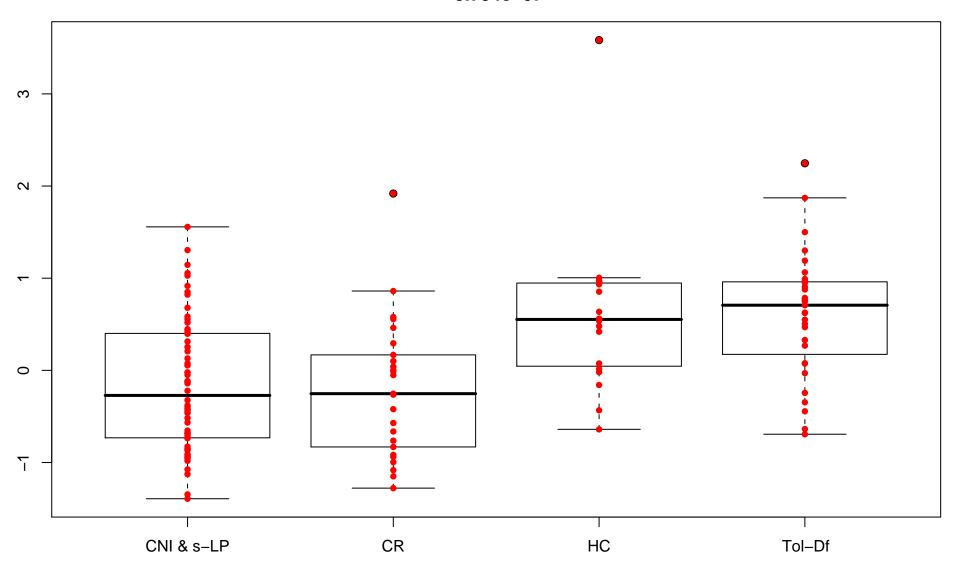
Rank 90 : QRSL1 3.532e-07



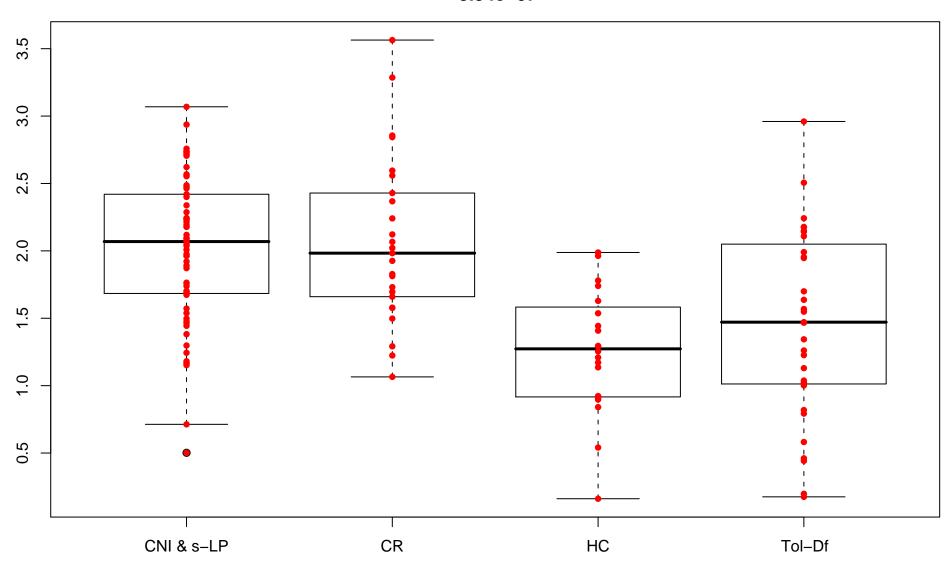
Rank 91 : MAOA 3.712e-07



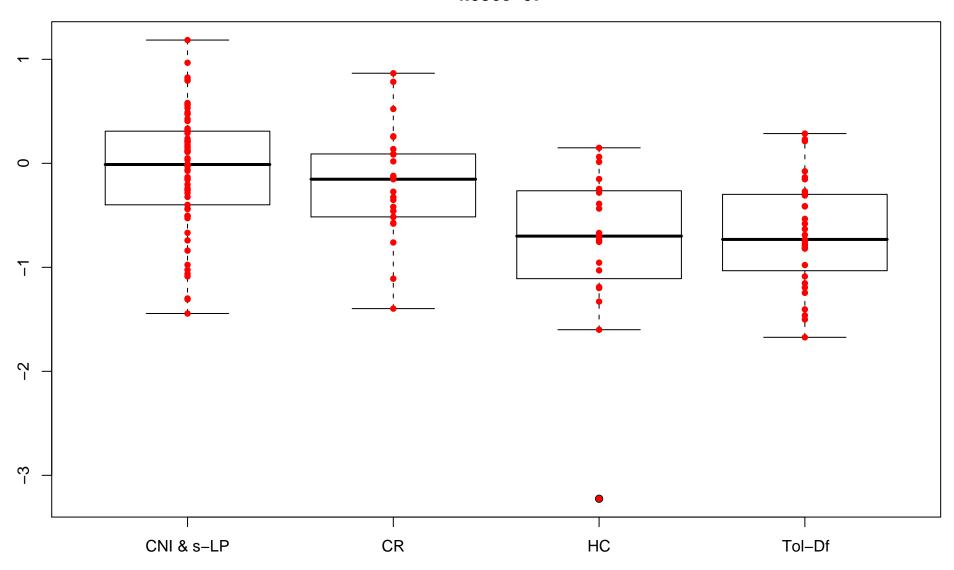
Rank 92: LOC643837 3.754e-07



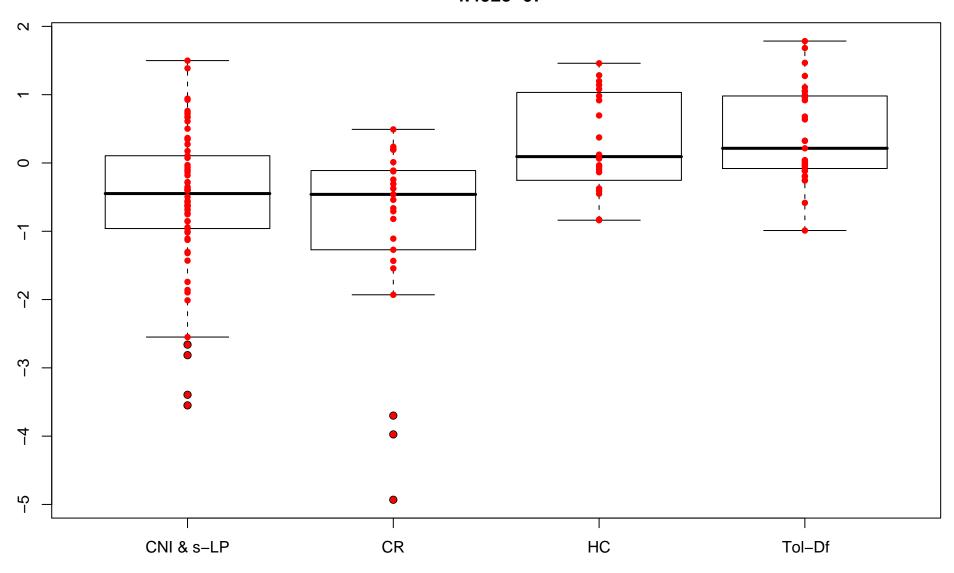
Rank 93 : TNCRNA 3.94e-07



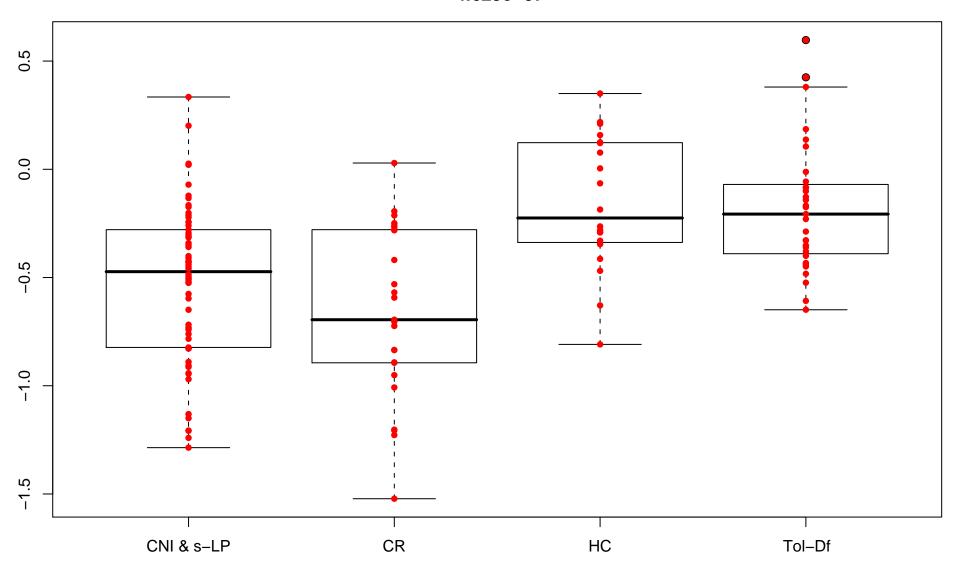
Rank 94: MAPK14 4.036e-07



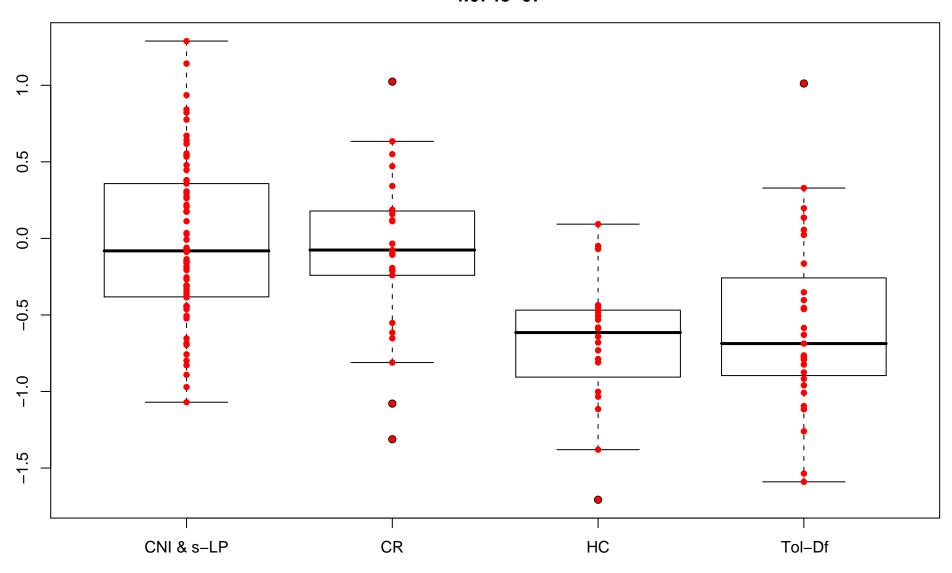
Rank 95 : CCR7 4.492e-07



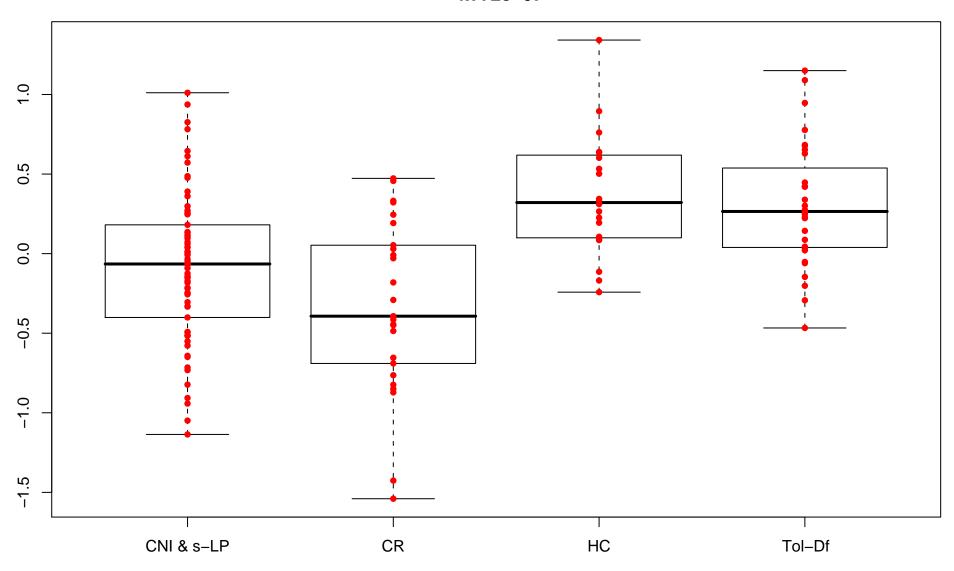
Rank 96: LOC729349 4.629e-07



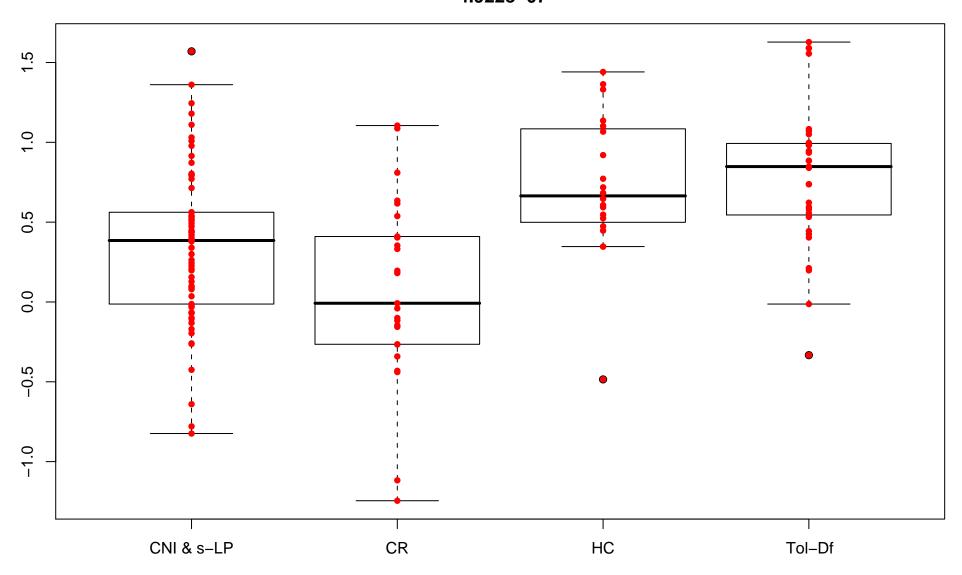
Rank 97: TLR5 4.674e-07



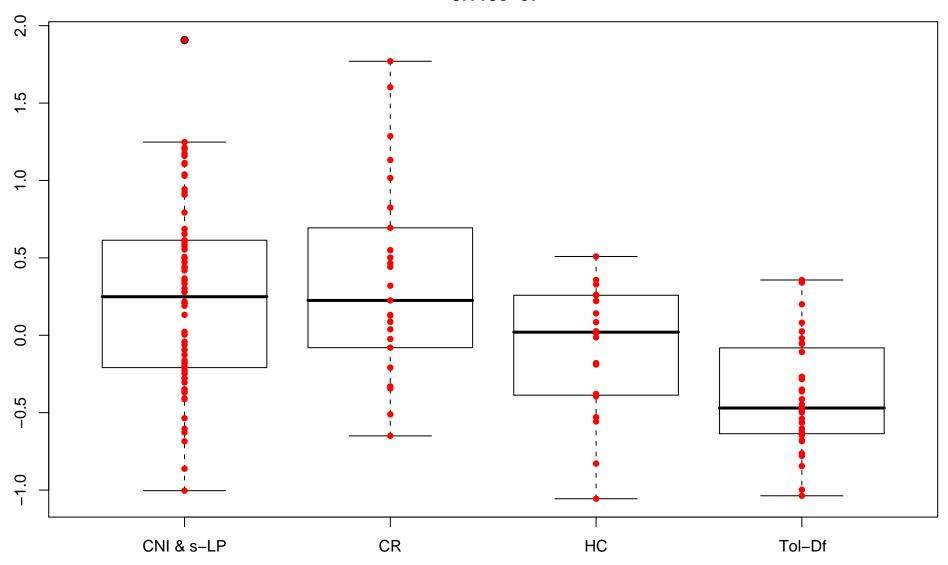
Rank 98 : MAGEH1 4.772e-07



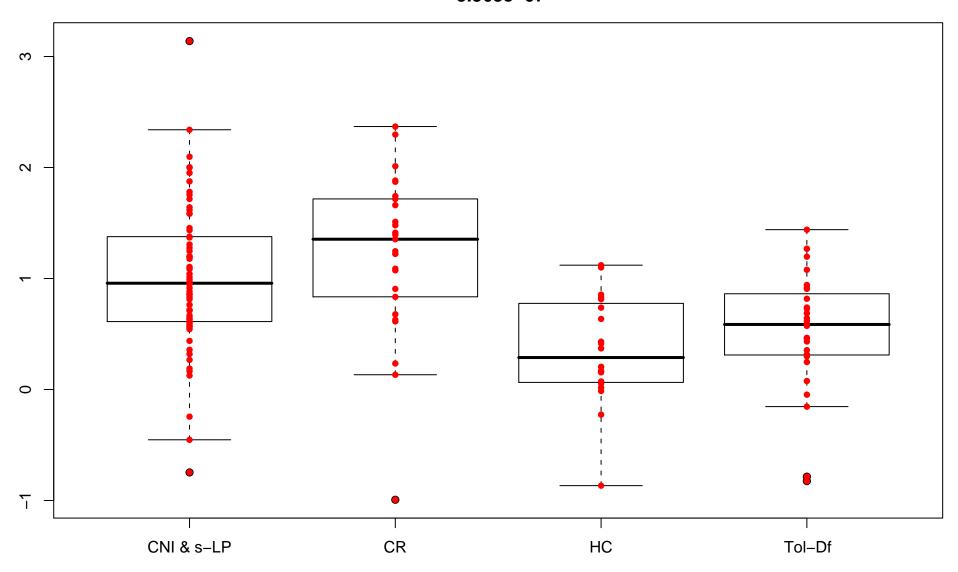
Rank 99 : ITK 4.922e-07



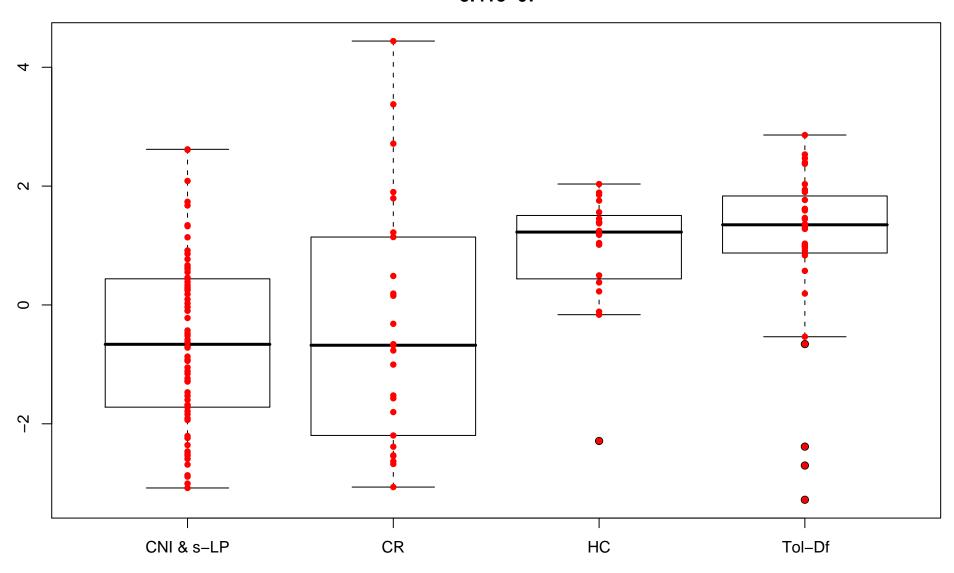
Rank 100 : GADD45A 5.113e-07



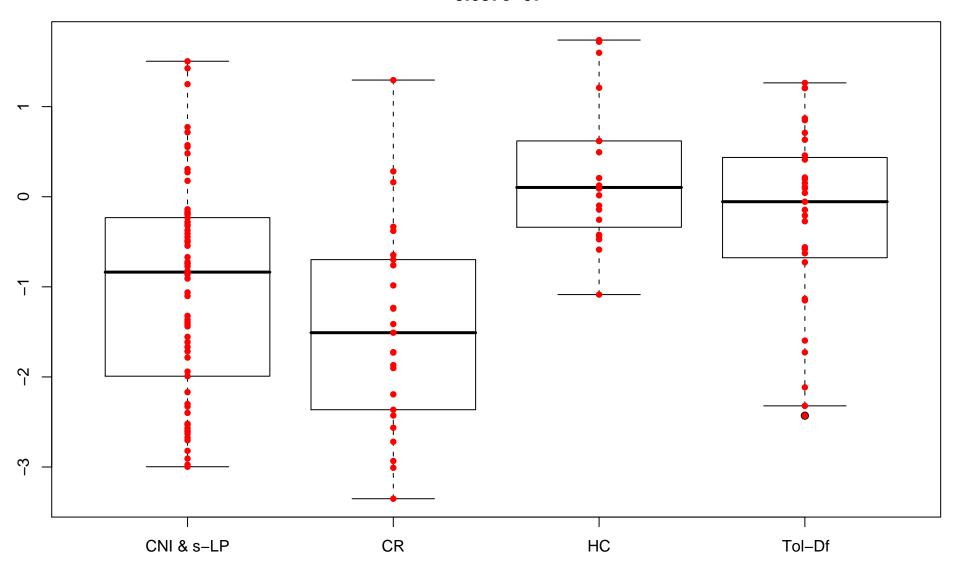
Rank 101 : FZD5 5.368e-07



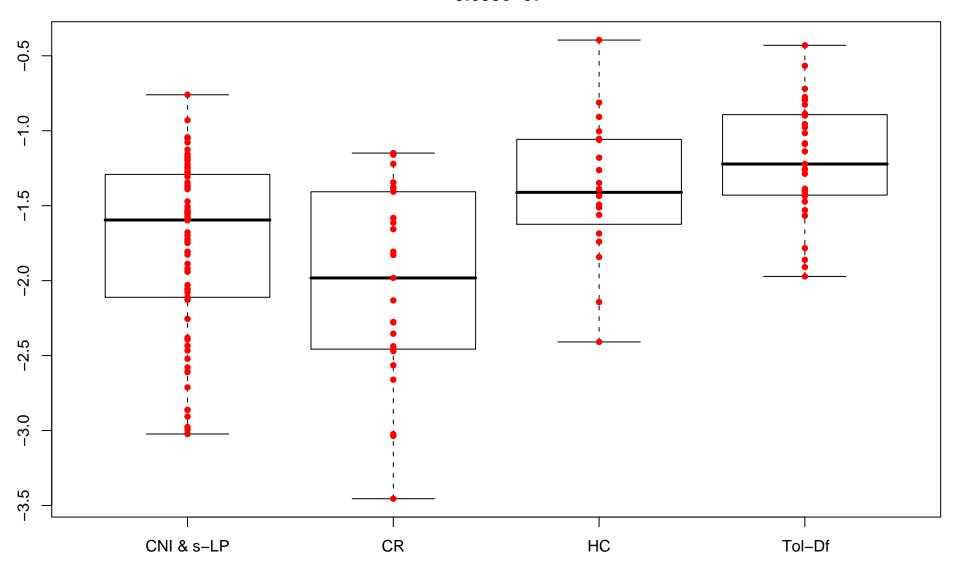
Rank 102 : EBF1 5.41e-07



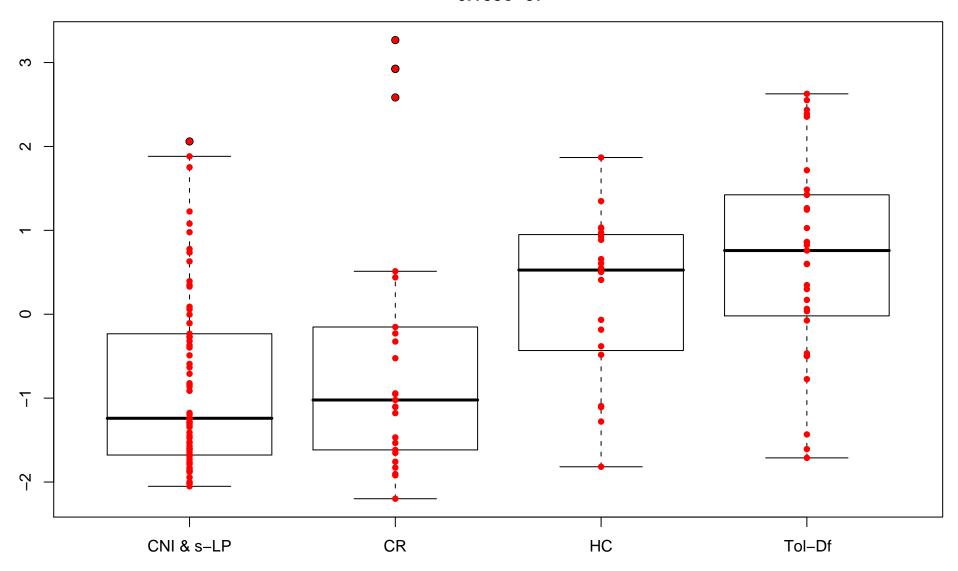
Rank 103 : SPON1 5.637e-07



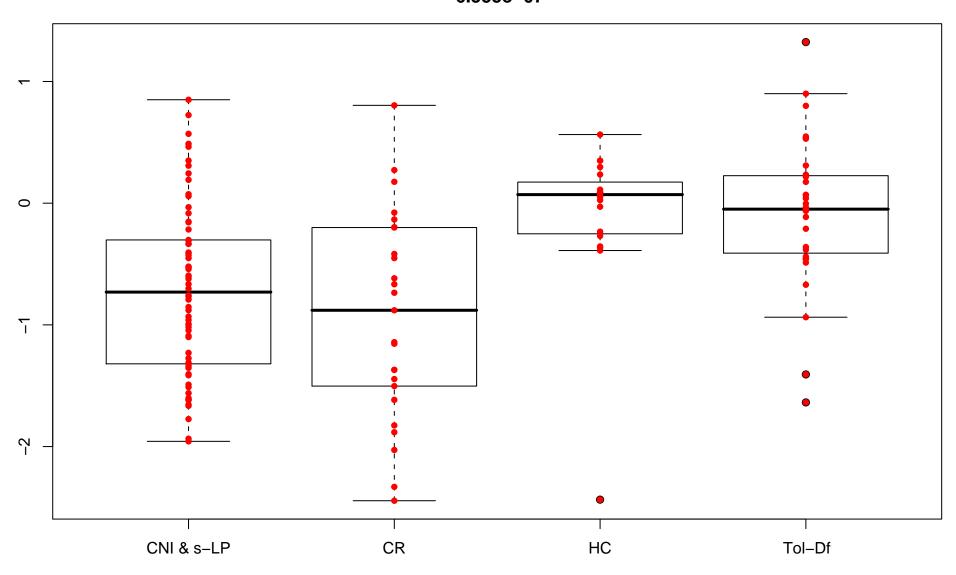
Rank 104 : RPS21 5.653e-07



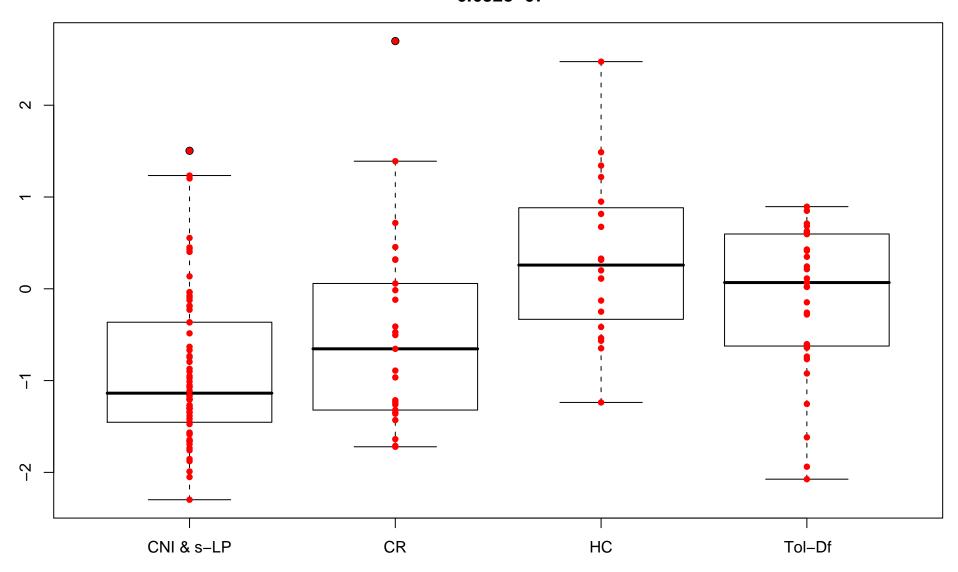
Rank 105 : EBF1 6.159e-07



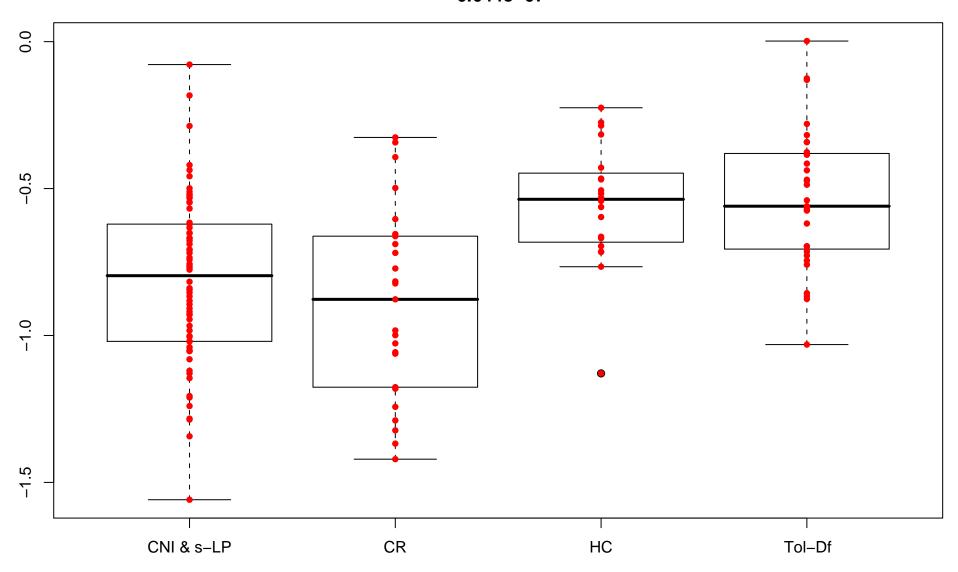
Rank 106 : AKR1C3 6.555e-07



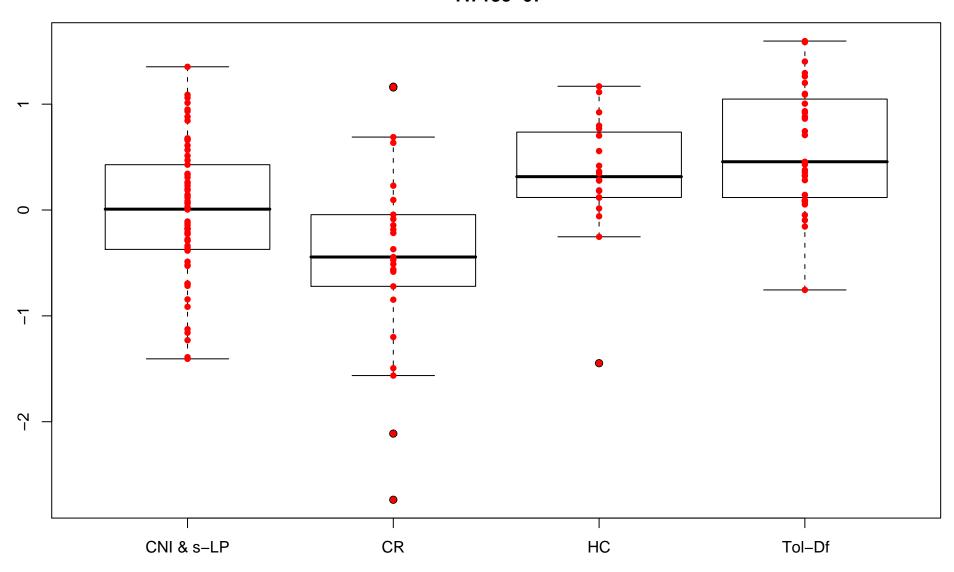
Rank 107 : OLIG2 6.632e-07



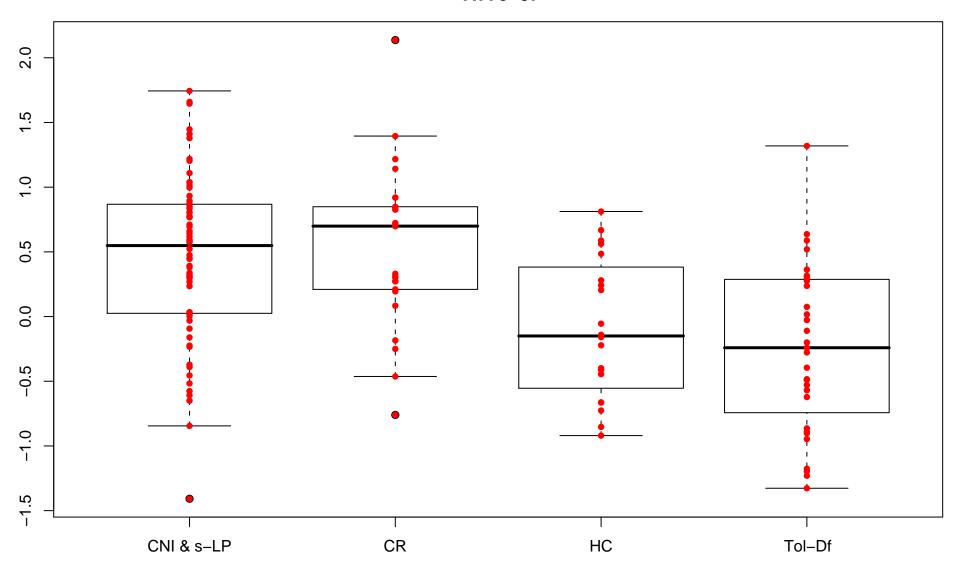
Rank 108 : RPA3 6.644e-07



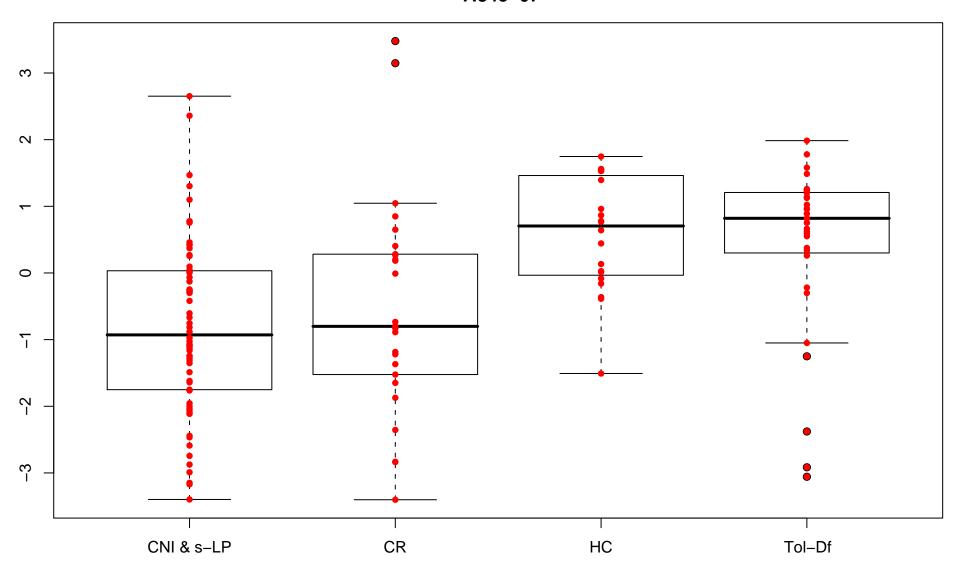
Rank 109 : EDG1 7.713e-07



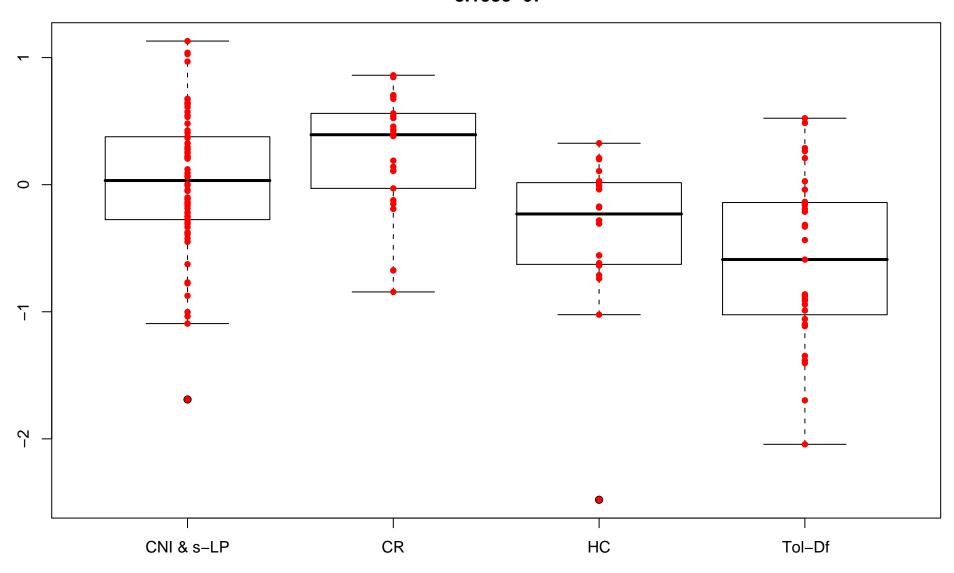
Rank 110 : MBOAT2 7.77e-07



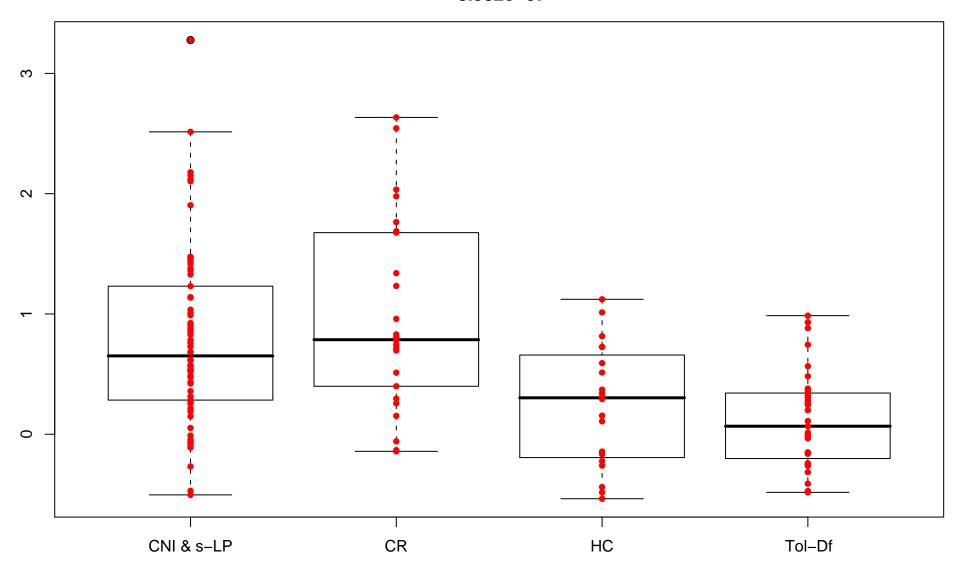
Rank 111 : BLK 7.84e-07



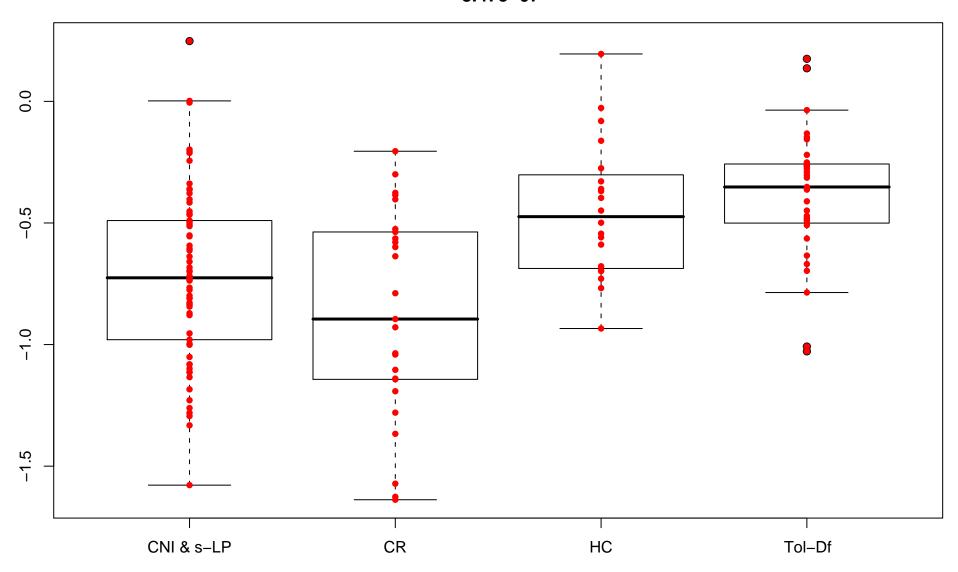
Rank 112 : KCNJ2 8.153e-07



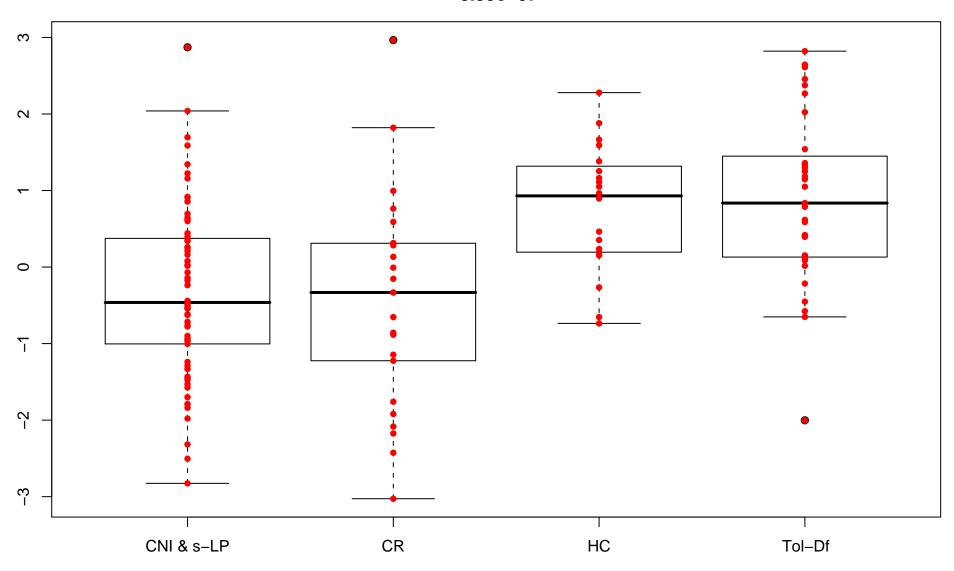
Rank 113 : FOXO3 8.382e-07



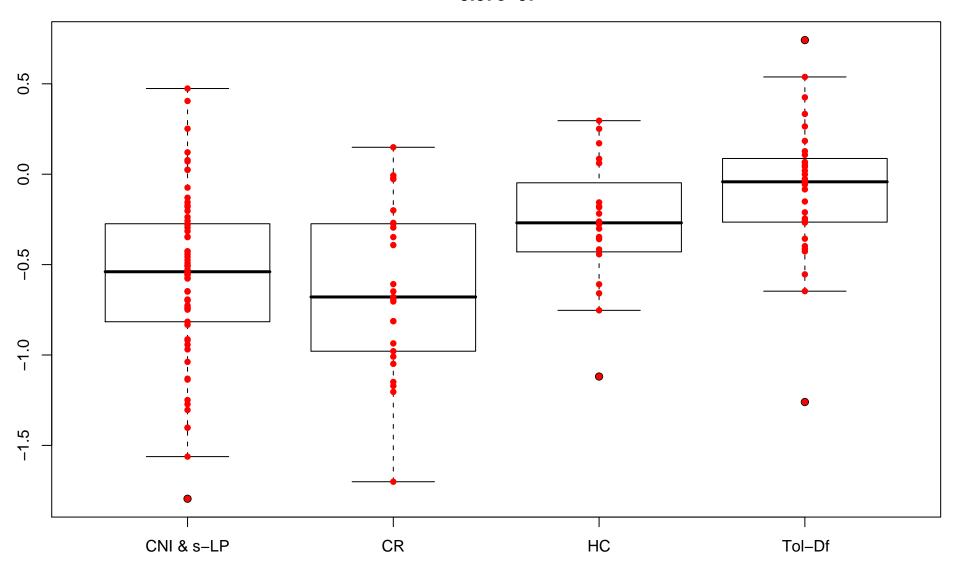
Rank 114: HSF2 8.47e-07



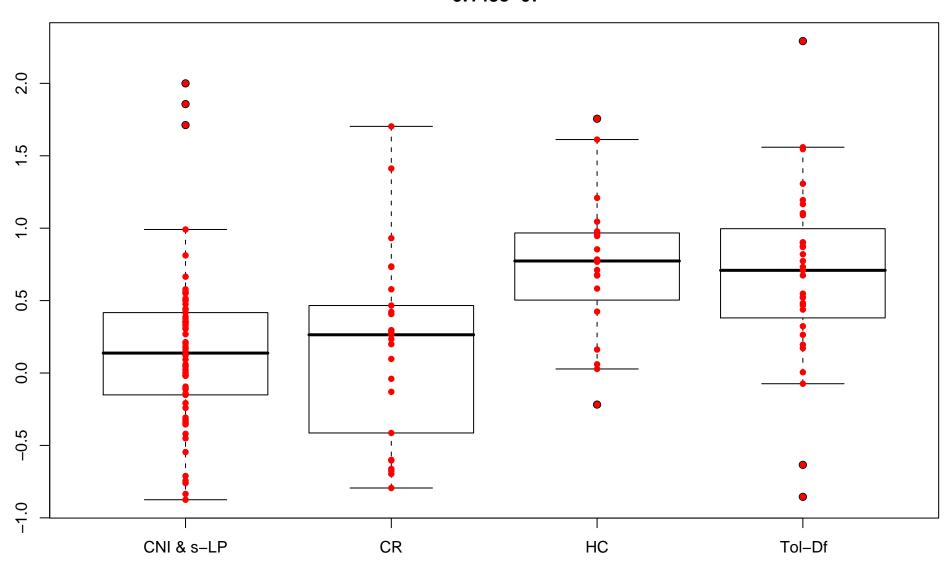
Rank 115 : DTX1 8.99e-07



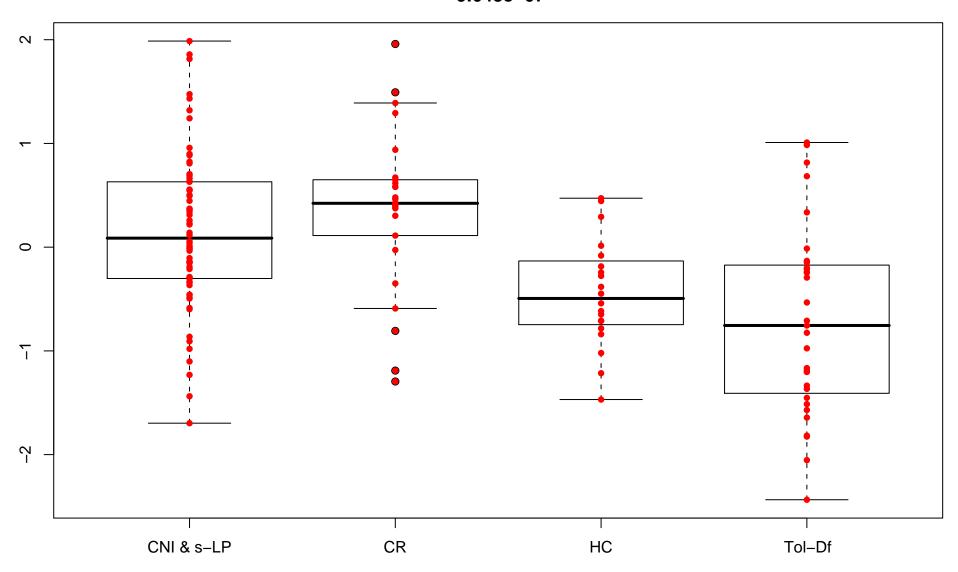
Rank 116: RPL30 9.07e-07



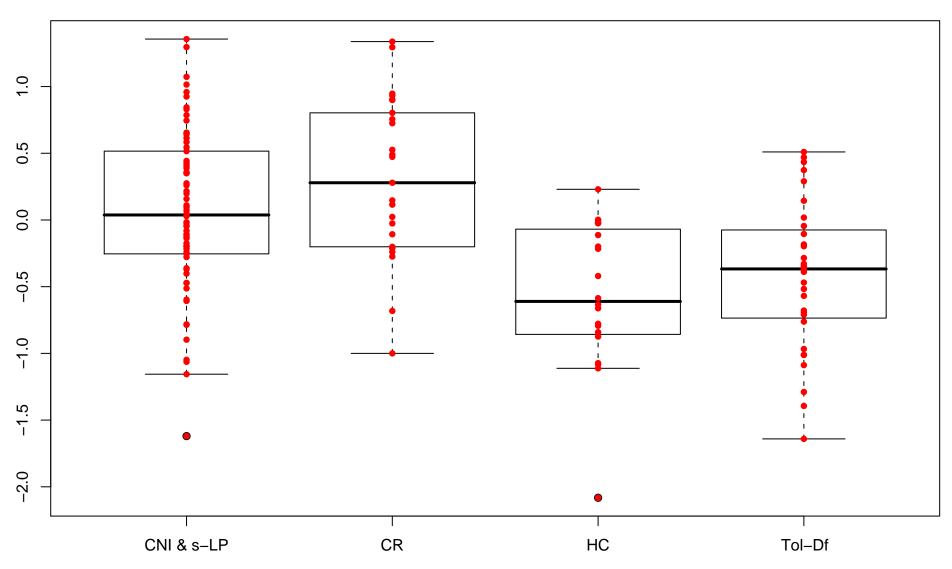
Rank 117: IL12RB2 9.143e-07



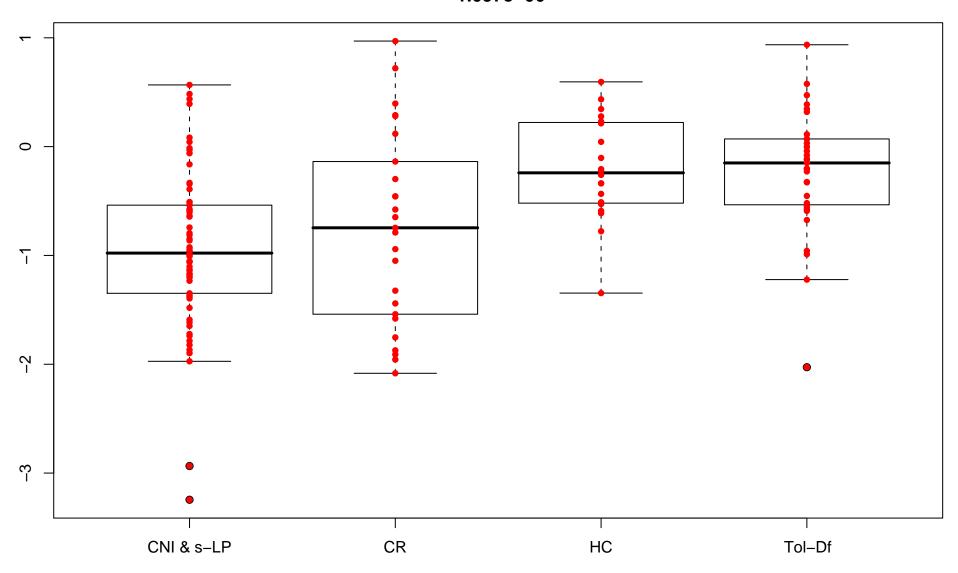
Rank 118 : FLJ36644 9.648e-07



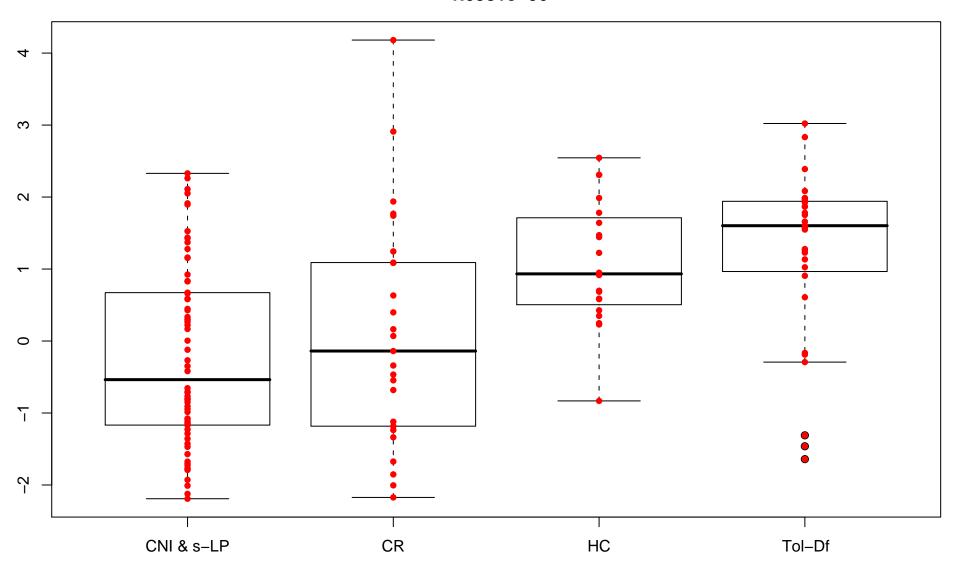
Rank 119 : SLC25A37 1.0423e-06



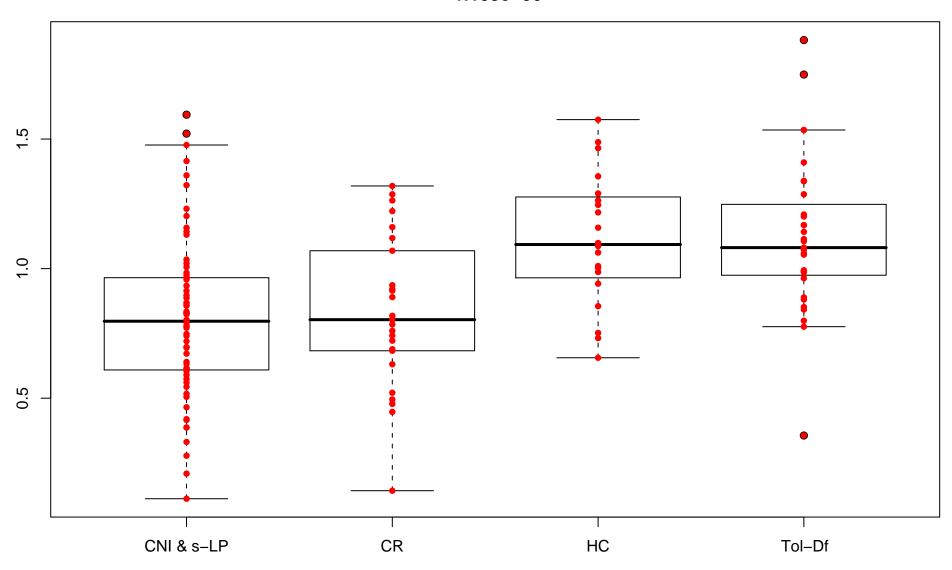
Rank 120 : CD19 1.097e-06



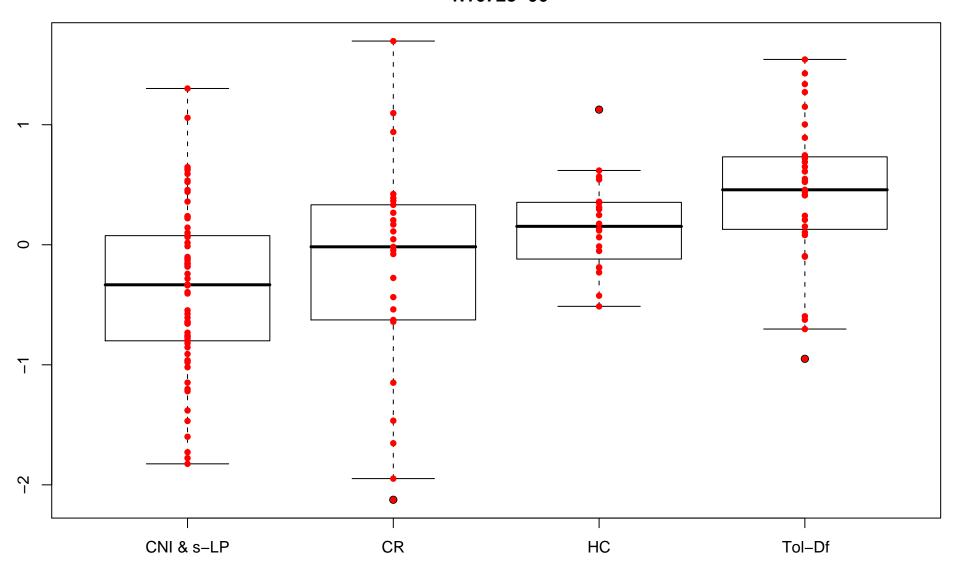
Rank 121 : CD22 1.0981e-06



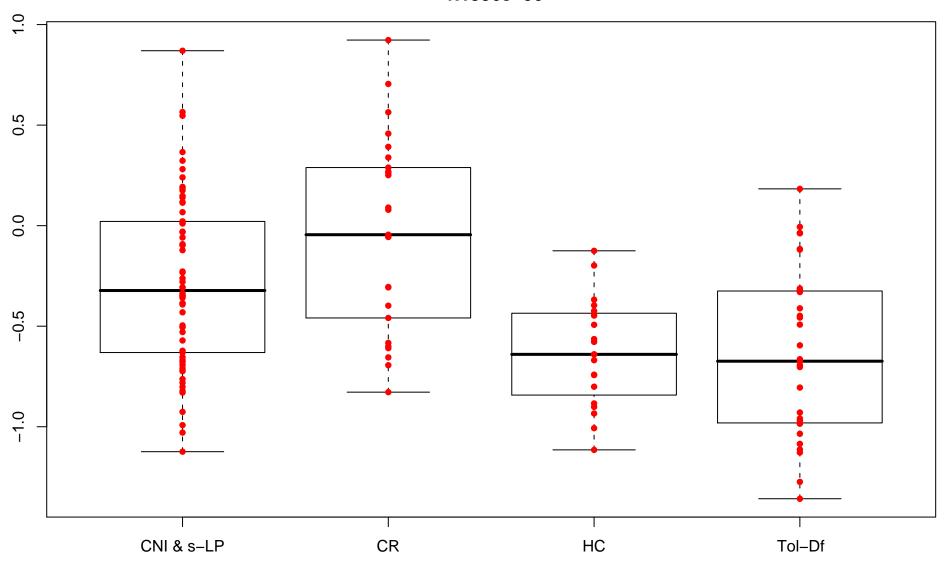
Rank 122 : EP400 1.105e-06



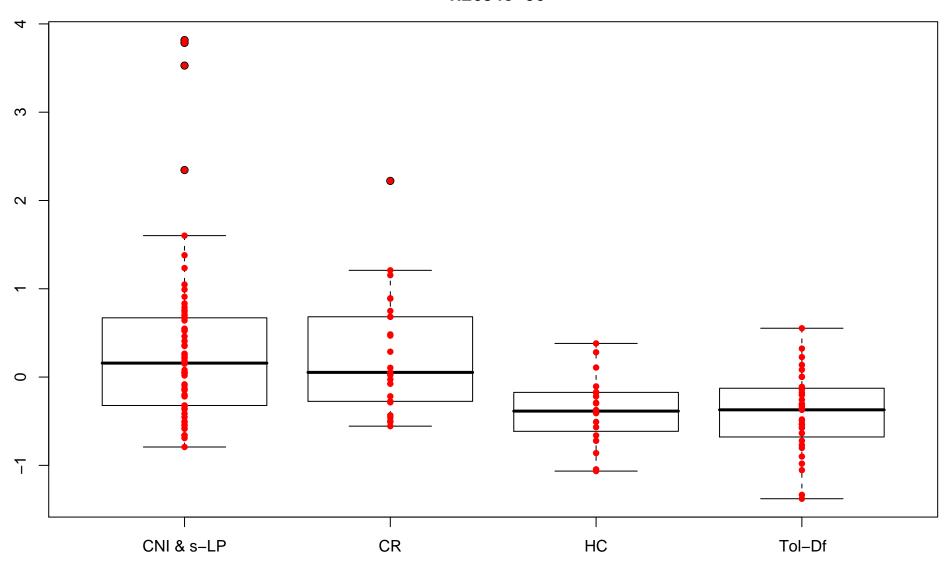
Rank 123 : CD83 1.1672e-06



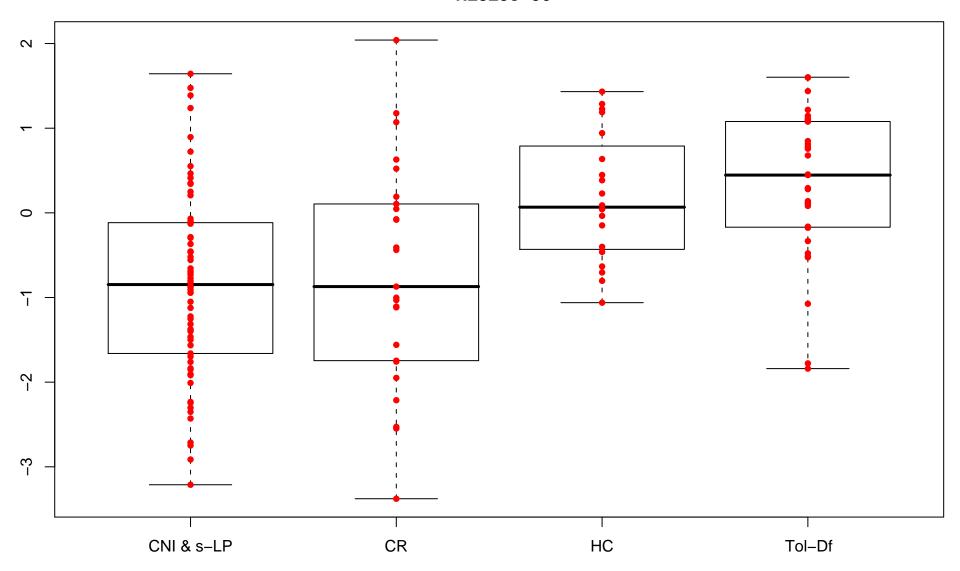
Rank 124 : IRAK3 1.1956e-06



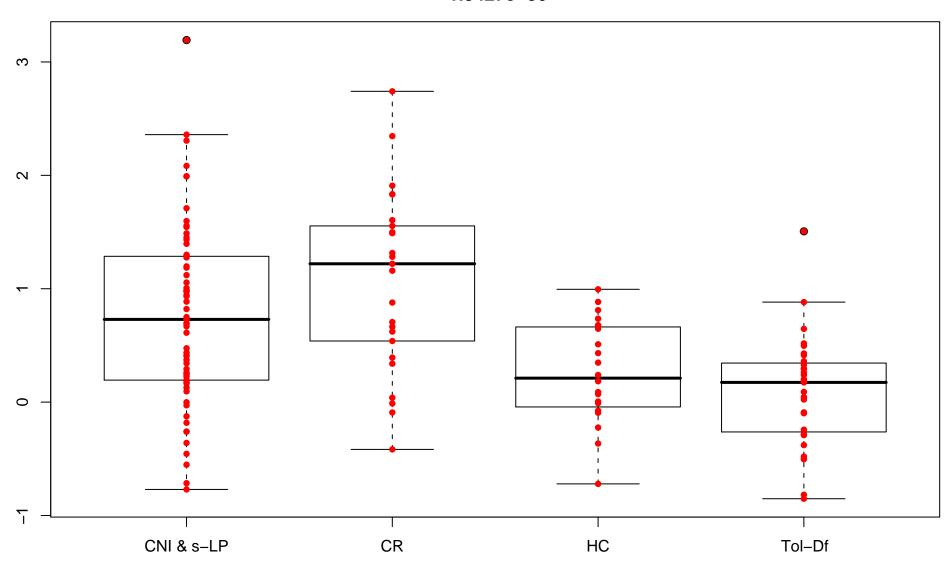
Rank 125 : GPR84 1.2634e-06



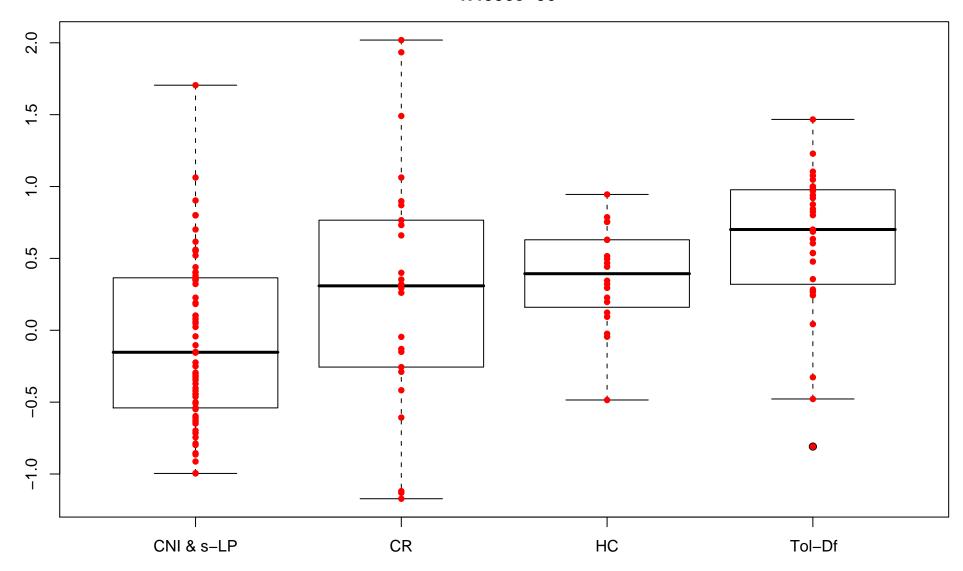
Rank 126 : GATM 1.2925e-06



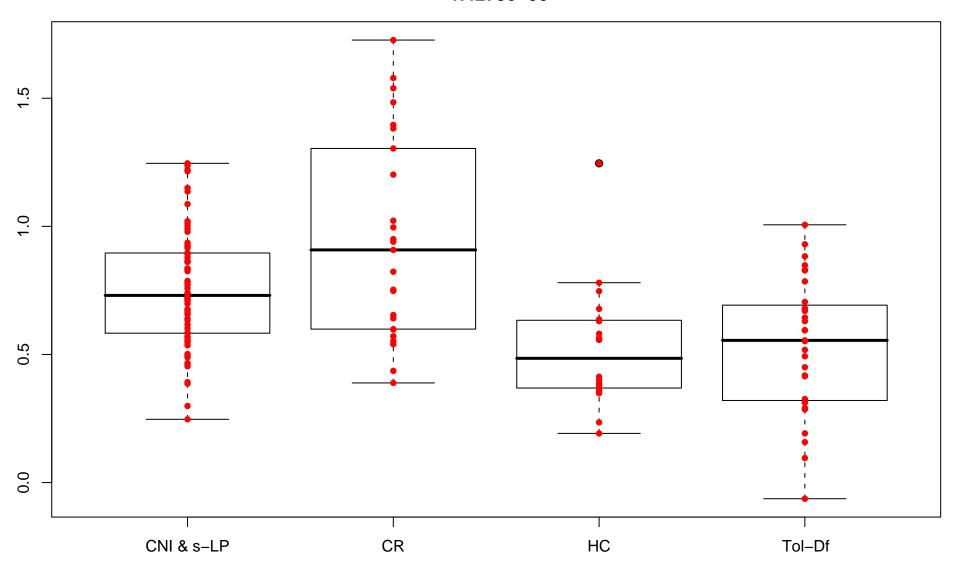
Rank 127 : THC2280867 1.3427e-06



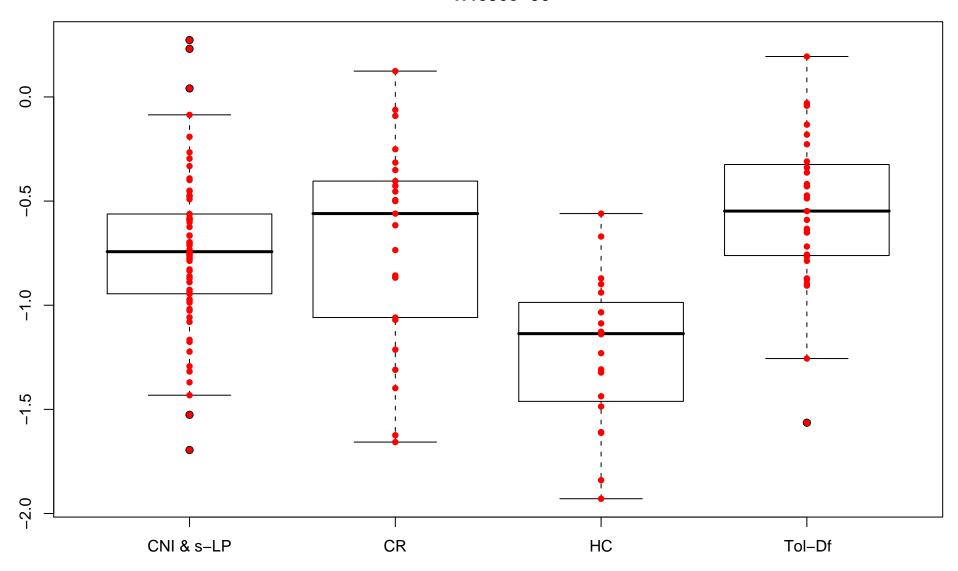
Rank 128 : HLA-DOB 1.4006e-06



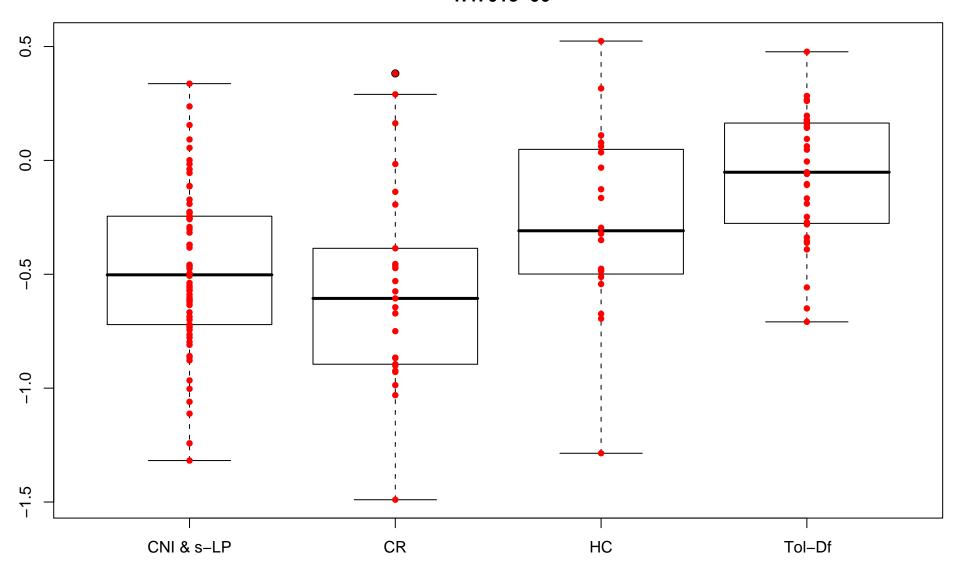
Rank 129 : ABCD1 1.4275e-06



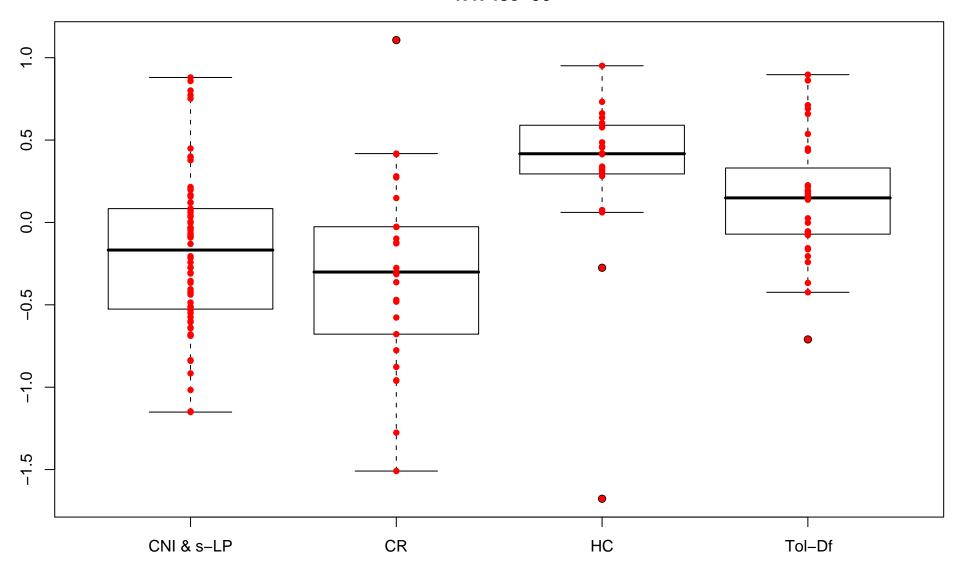
Rank 130 : UVRAG 1.4686e-06



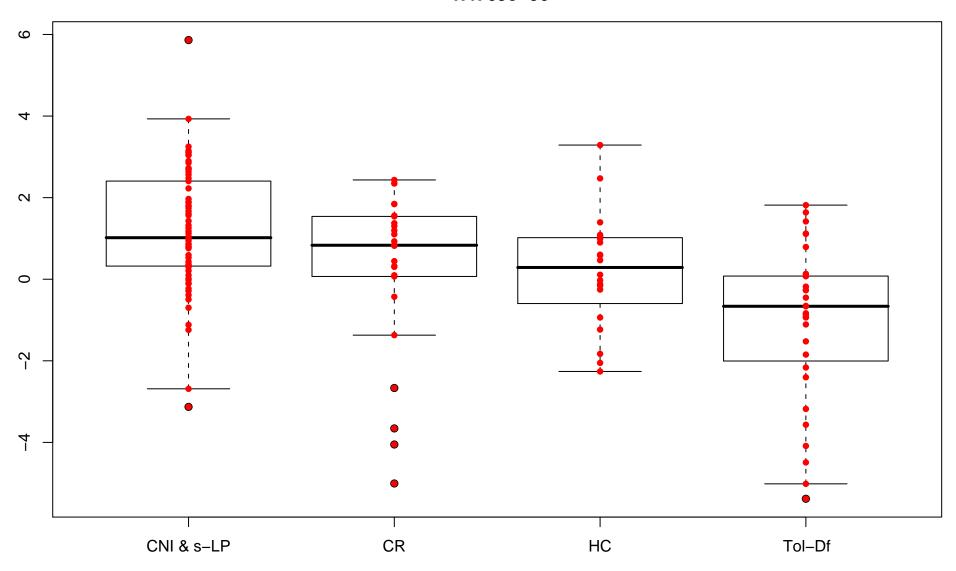
Rank 131 : PPIL3 1.4701e-06



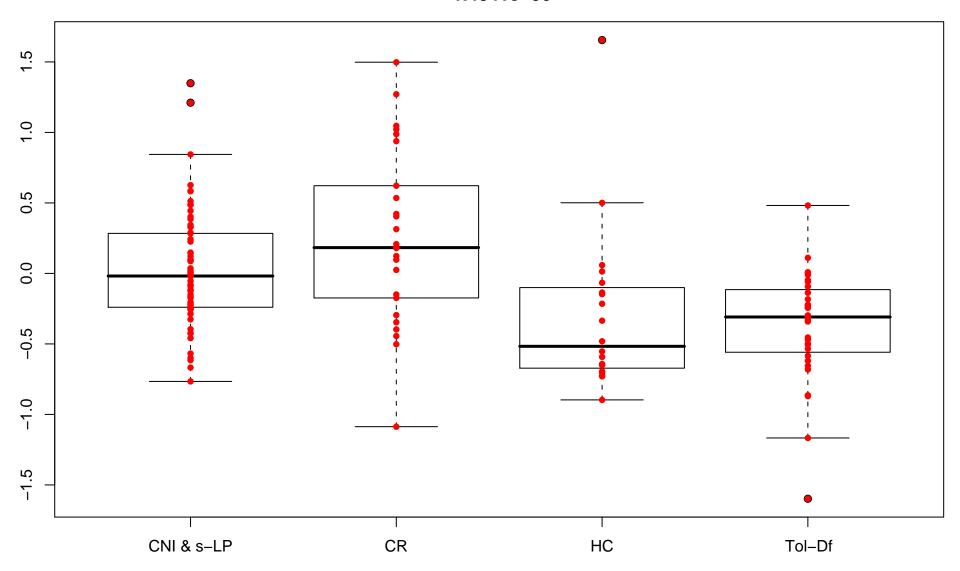
Rank 132 : TNFAIP8 1.4748e-06



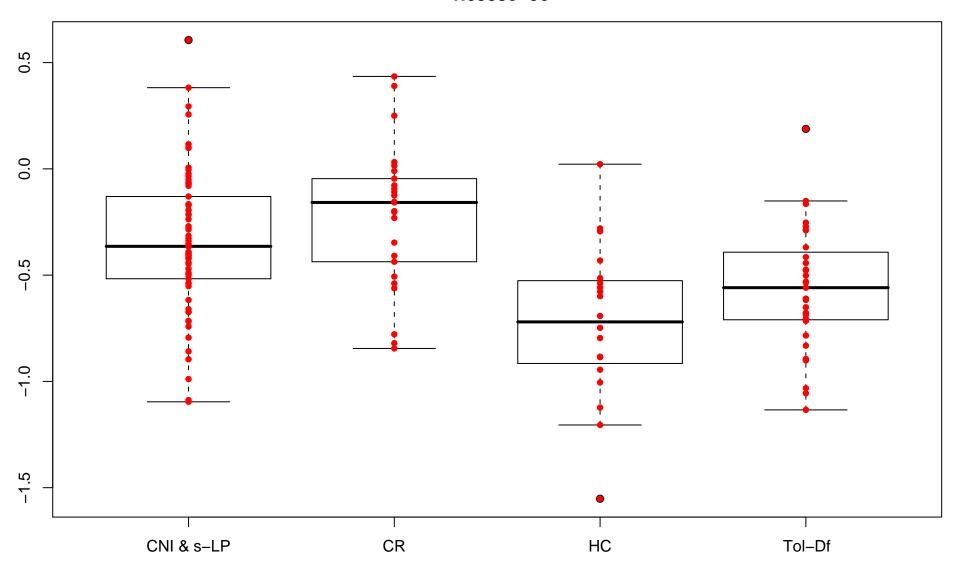
Rank 133 : OLFM4 1.4769e-06



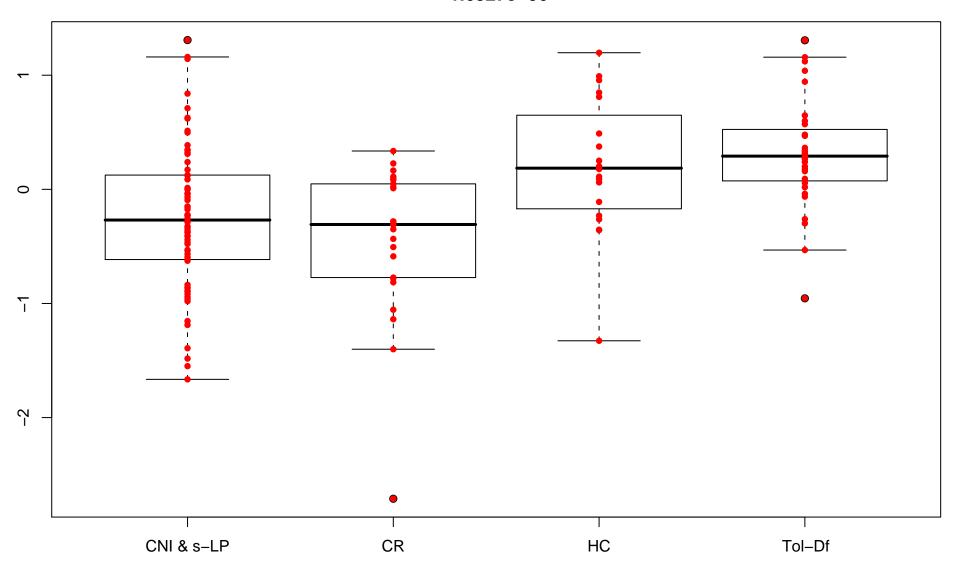
Rank 134 : BAG1 1.4841e-06



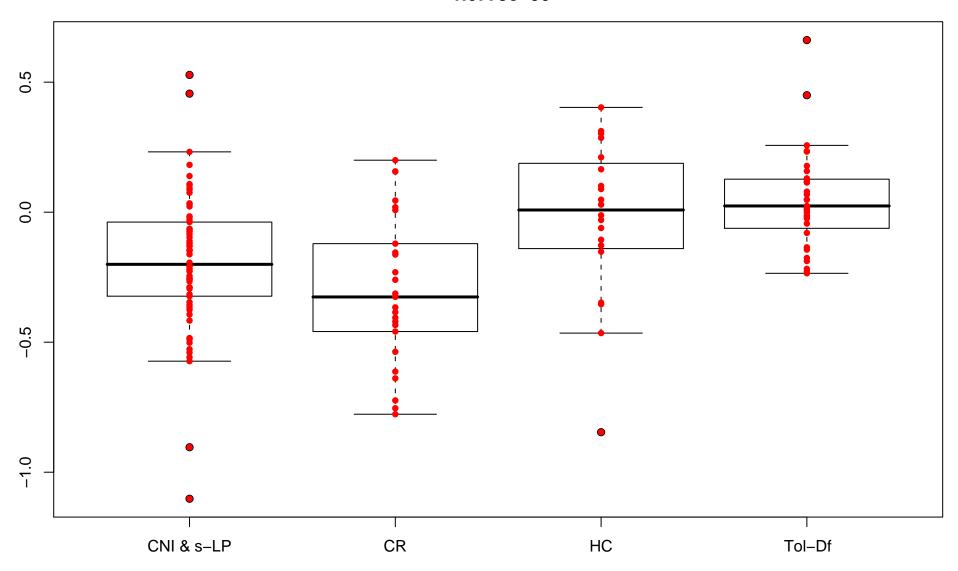
Rank 135 : CXORF21 1.6388e-06



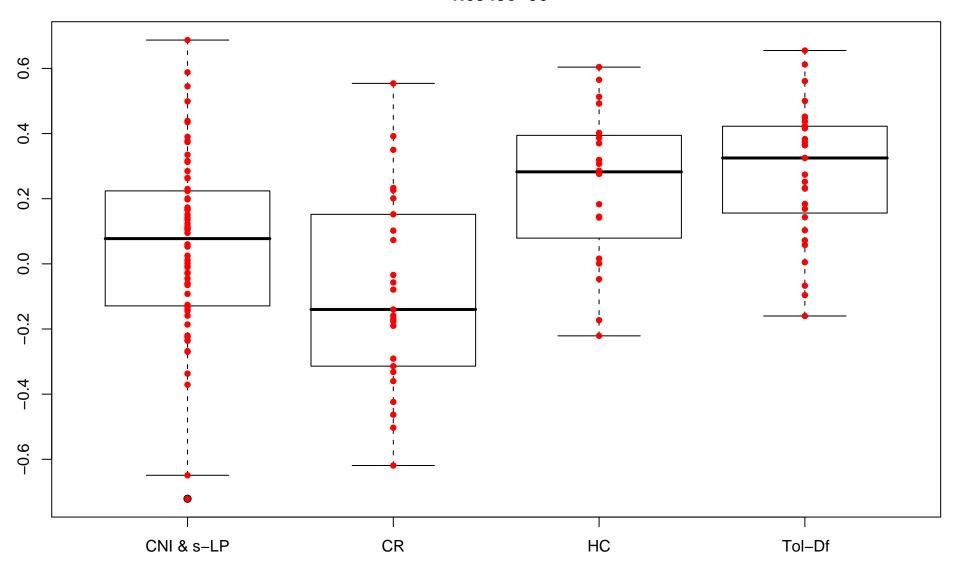
Rank 136 : PIK3IP1 1.6527e-06



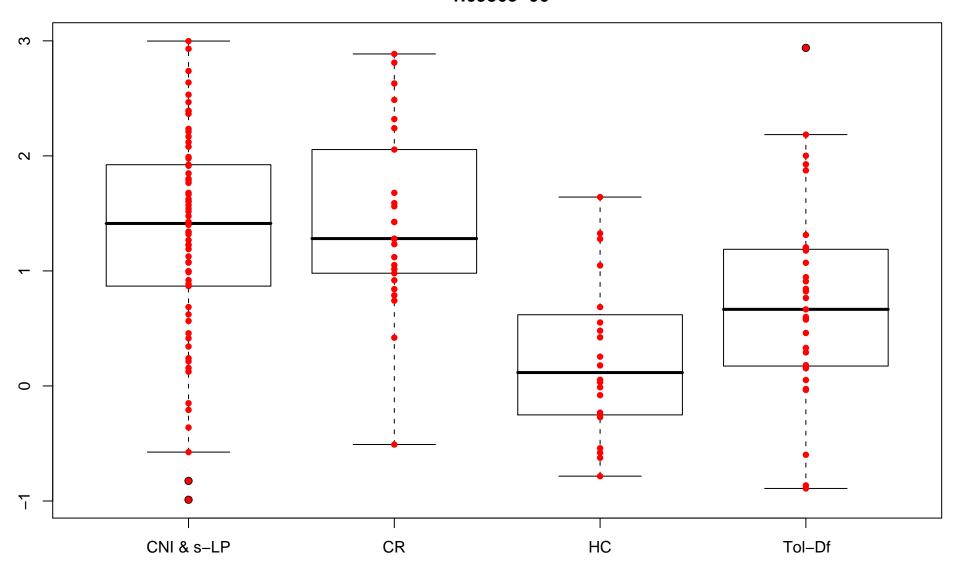
Rank 137: LETMD1 1.6779e-06



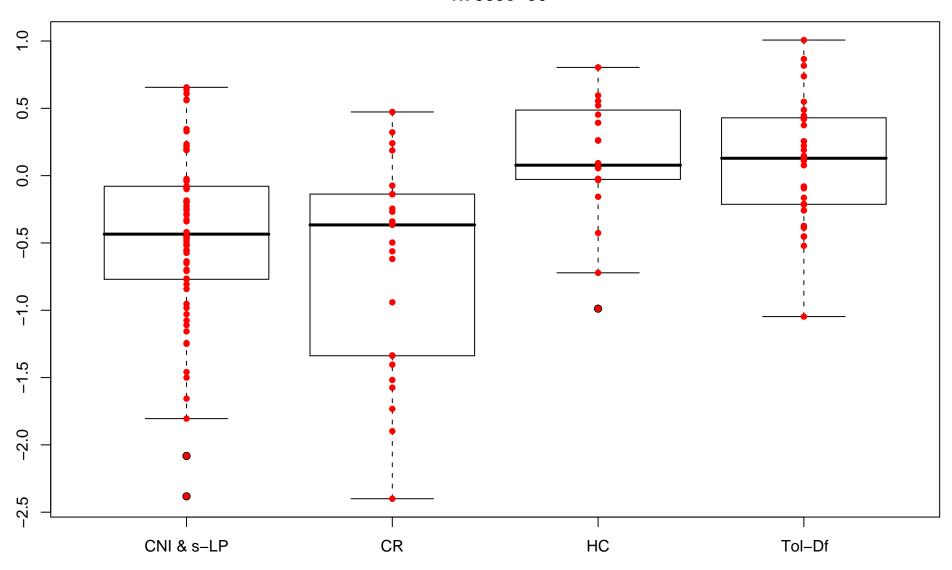
Rank 138 : ZBED5 1.6949e-06



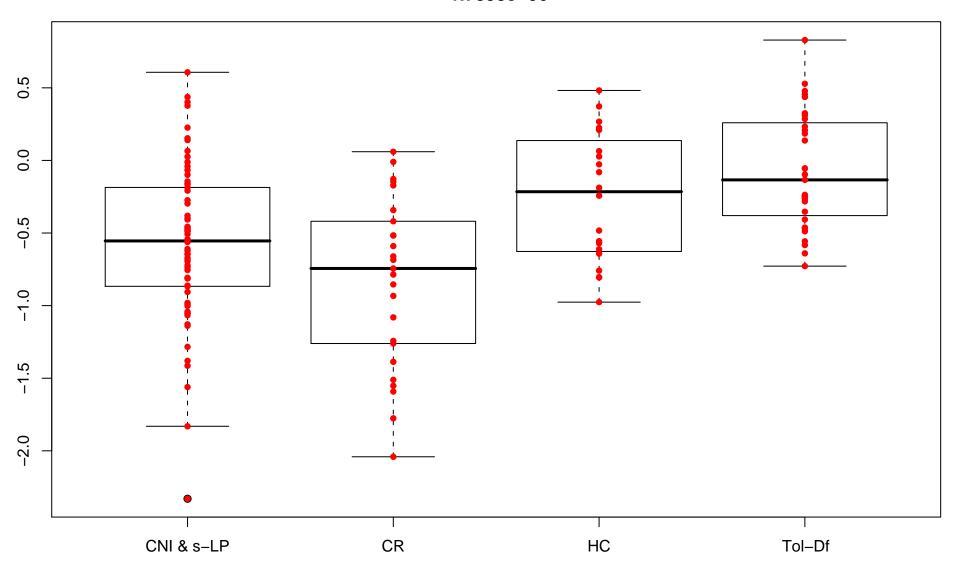
Rank 139: TIMP2;LOC732206 1.6986e-06



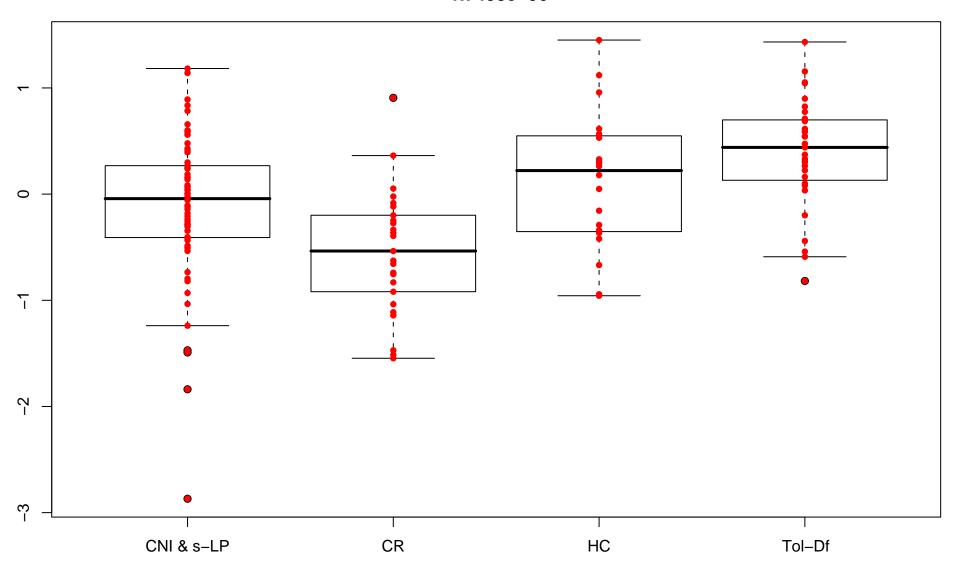
Rank 140 : EEF1A1;EEF1AL7 1.7305e-06



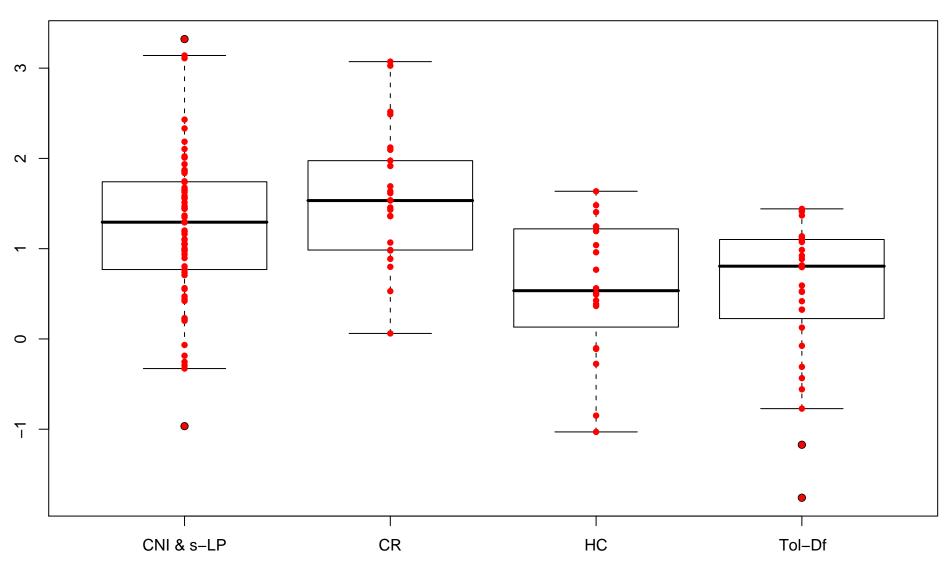
Rank 141 : NUBPL 1.7398e-06



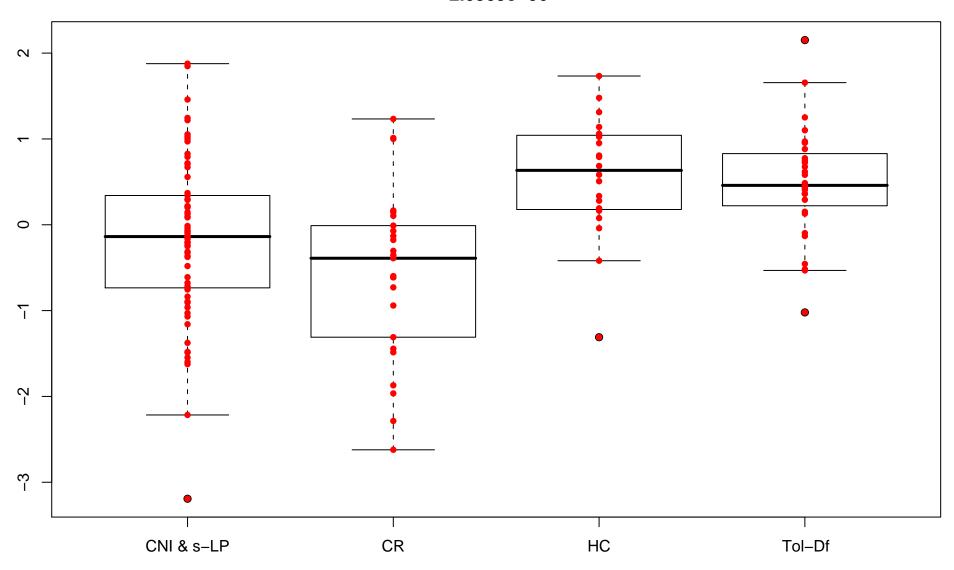
Rank 142 : HOXB2 1.7458e-06



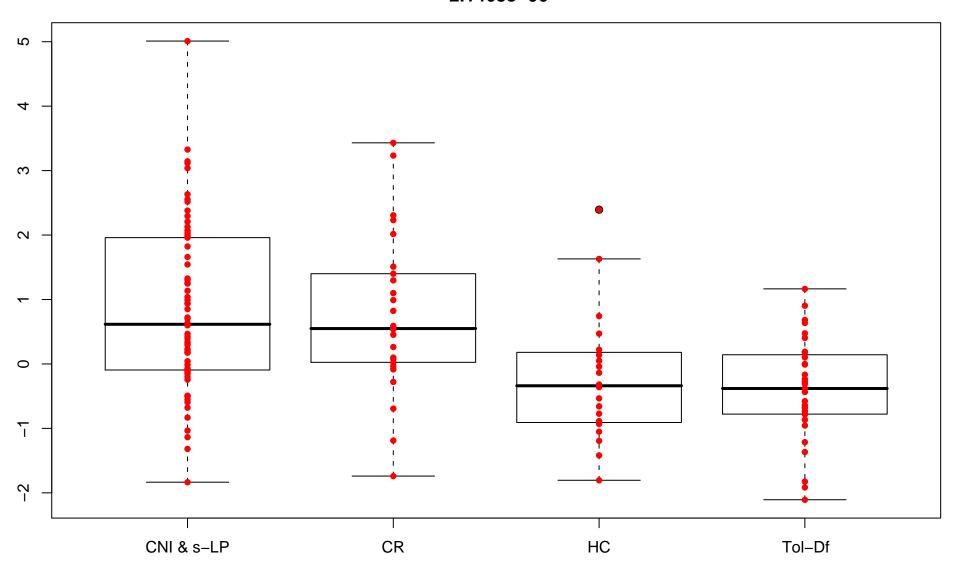
Rank 143: PTPRF 1.9735e-06



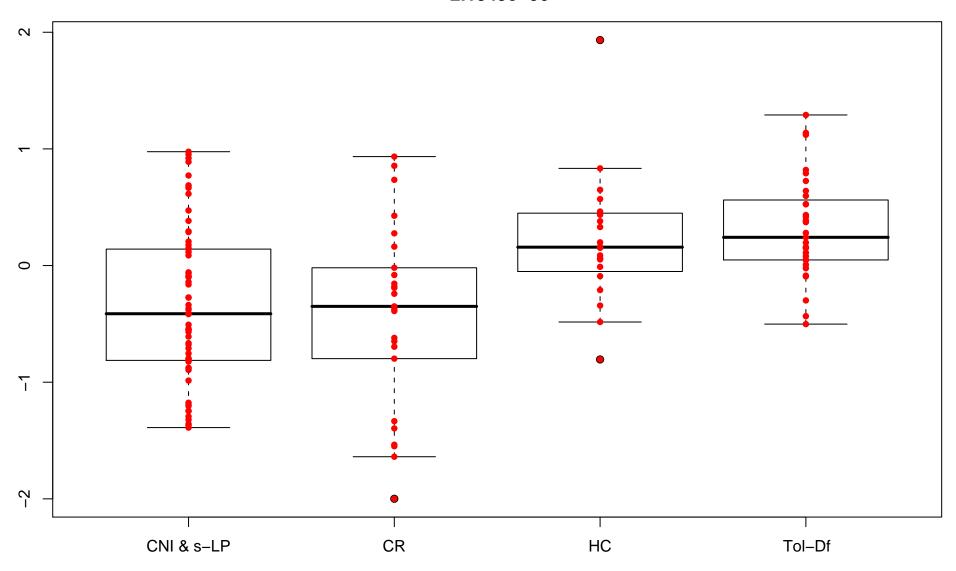
Rank 144 : NELL2 2.0909e-06



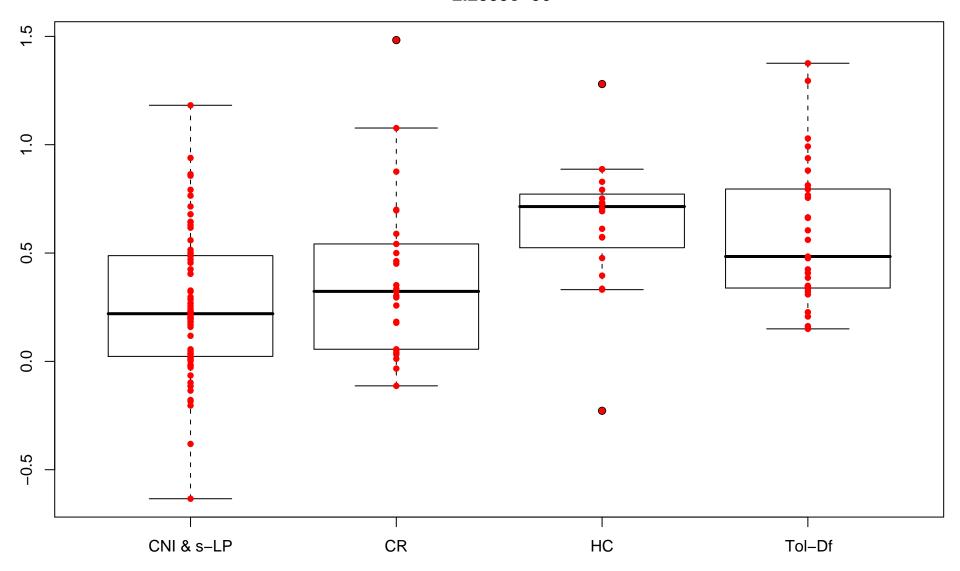
Rank 145 : LCN2 2.1468e-06



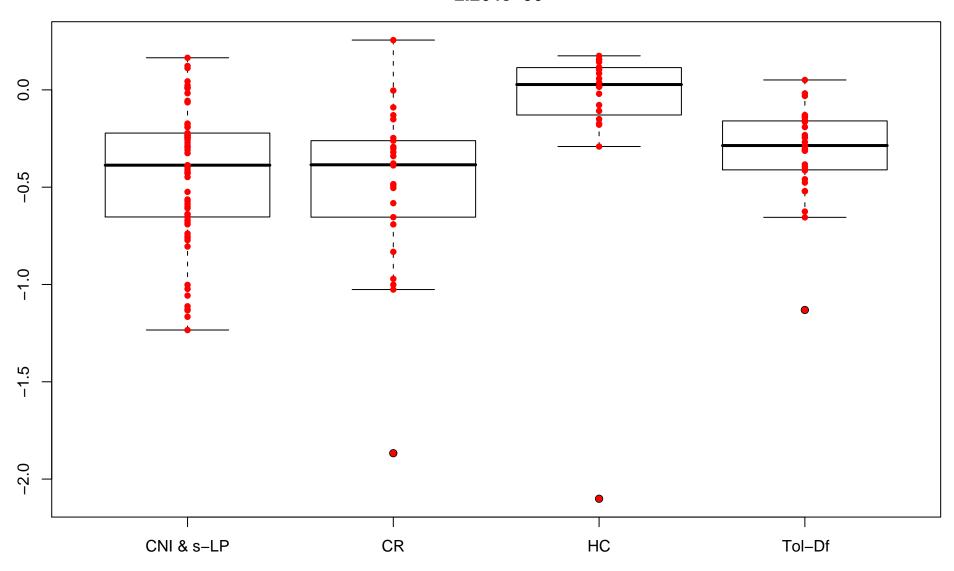
Rank 146 : TCF4 2.1549e-06



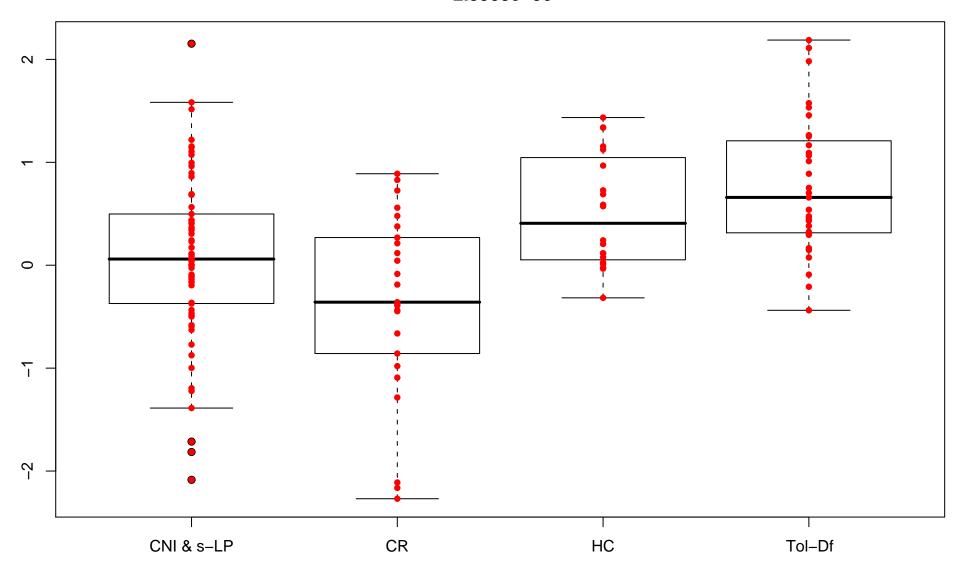
Rank 147: MARCKSL1 2.2539e-06



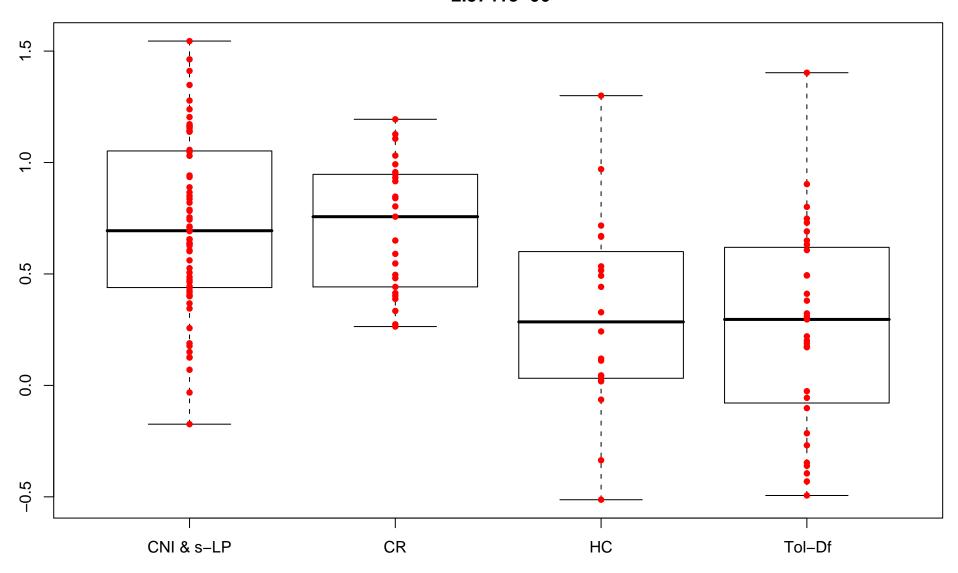
Rank 148 : PSMA1 2.264e-06



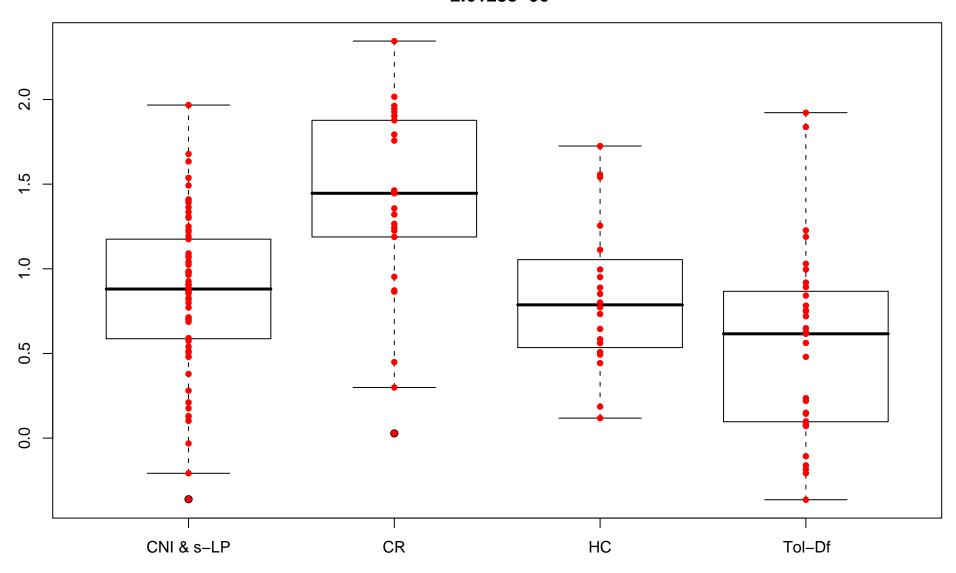
Rank 149: TCF7 2.3908e-06



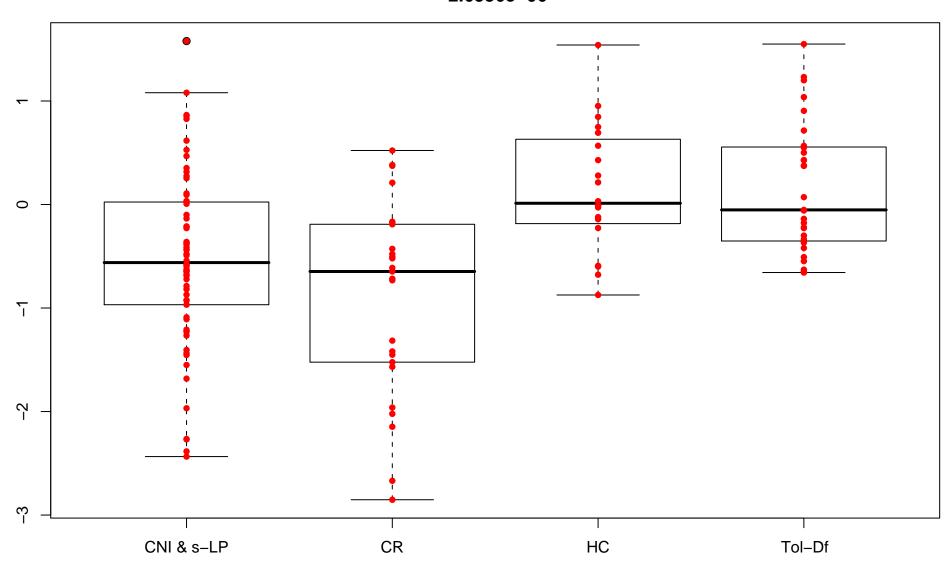
Rank 150 : HLX 2.5741e-06



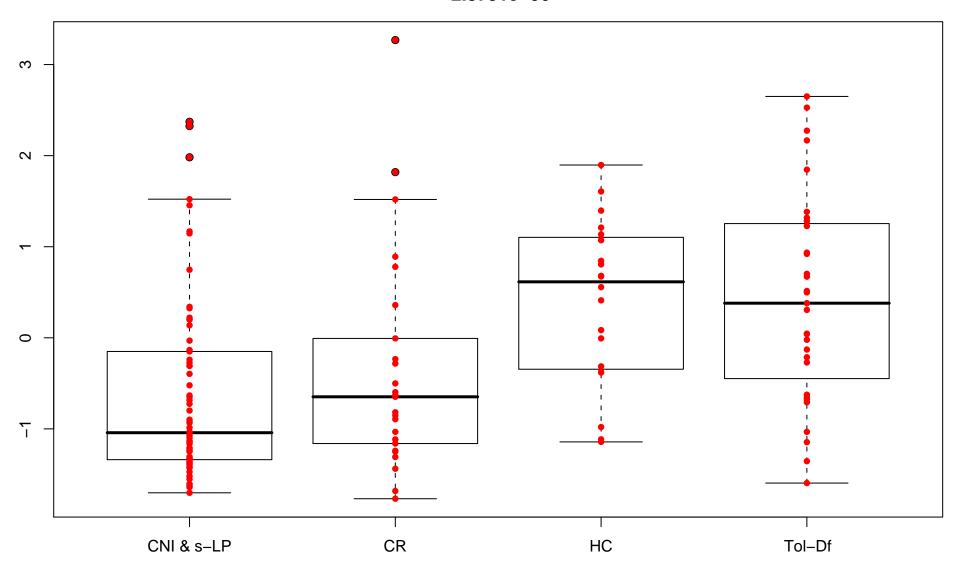
Rank 151 : EGR1 2.6123e-06



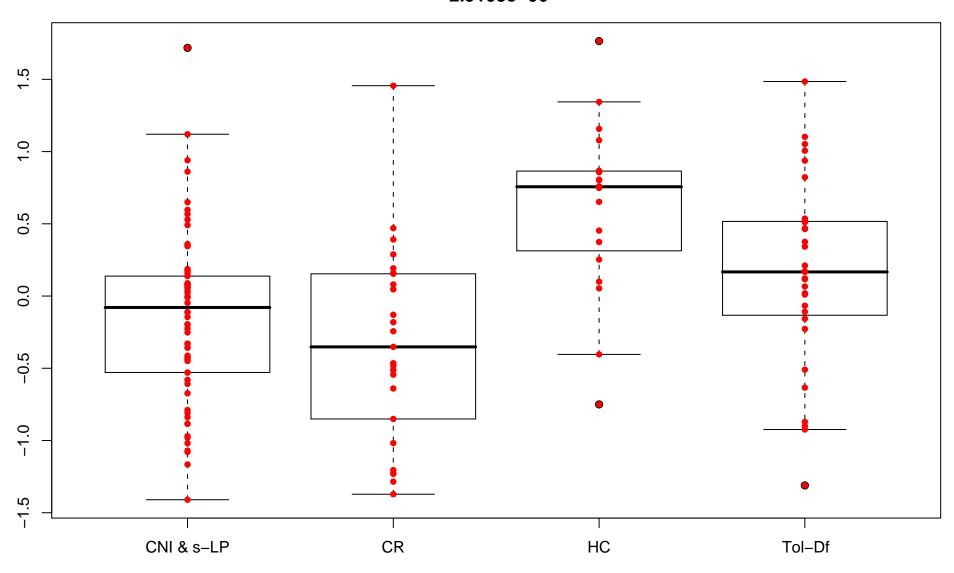
Rank 152 : IL23A 2.6536e-06



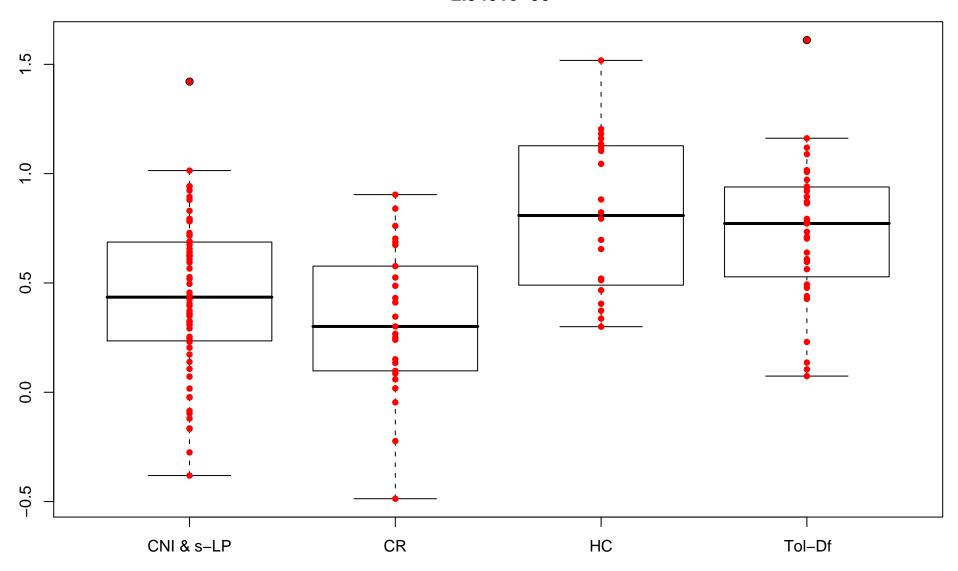
Rank 153 : AF471475 2.8731e-06



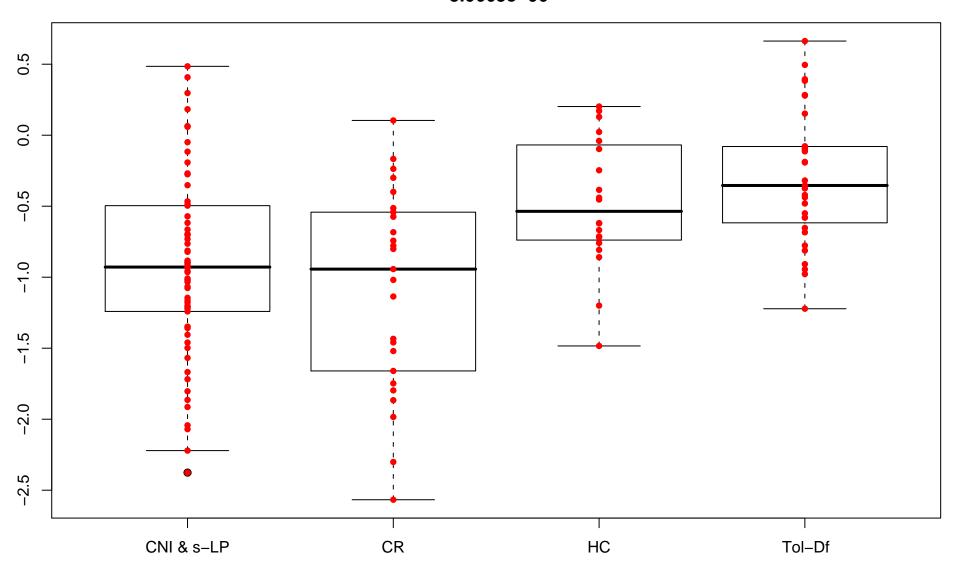
Rank 154 : CCR4 2.9108e-06



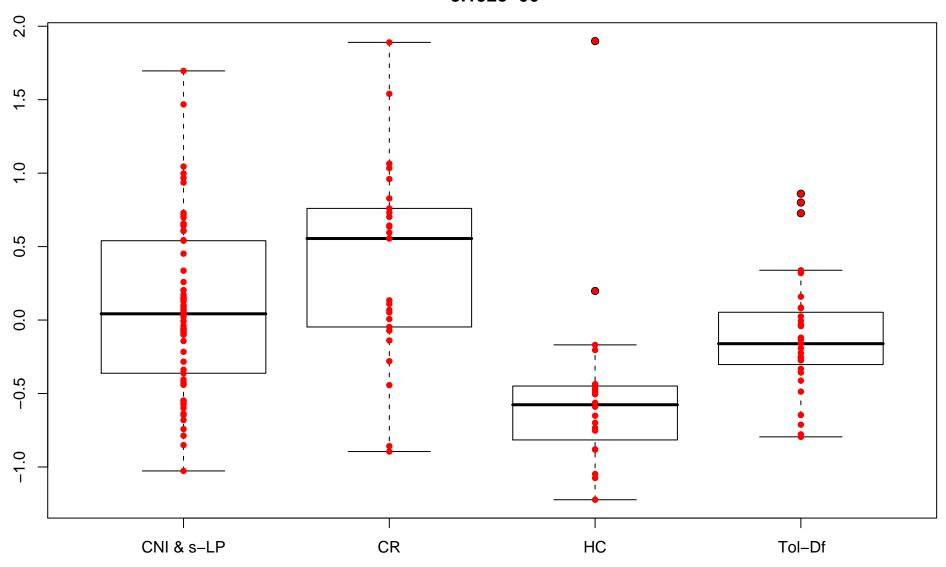
Rank 155: HNRPH1 2.9401e-06



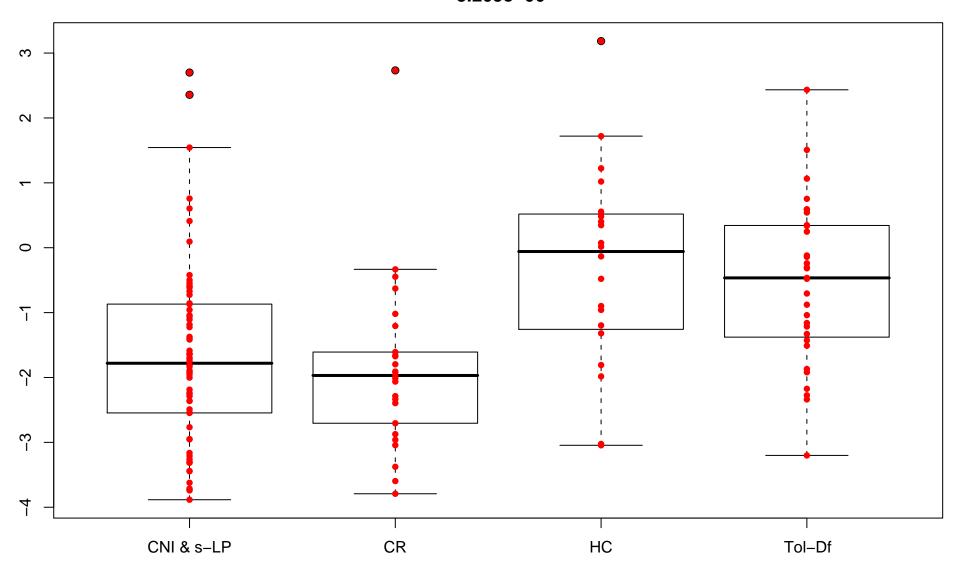
Rank 156: HCG\_1984468;LOC388524;RPSA 3.0663e-06



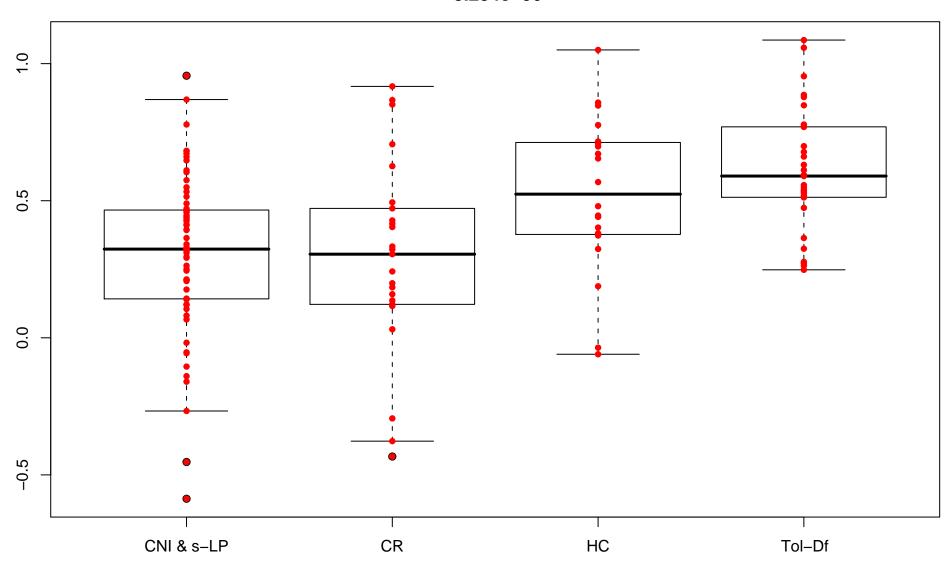
Rank 157: MT1E 3.192e-06



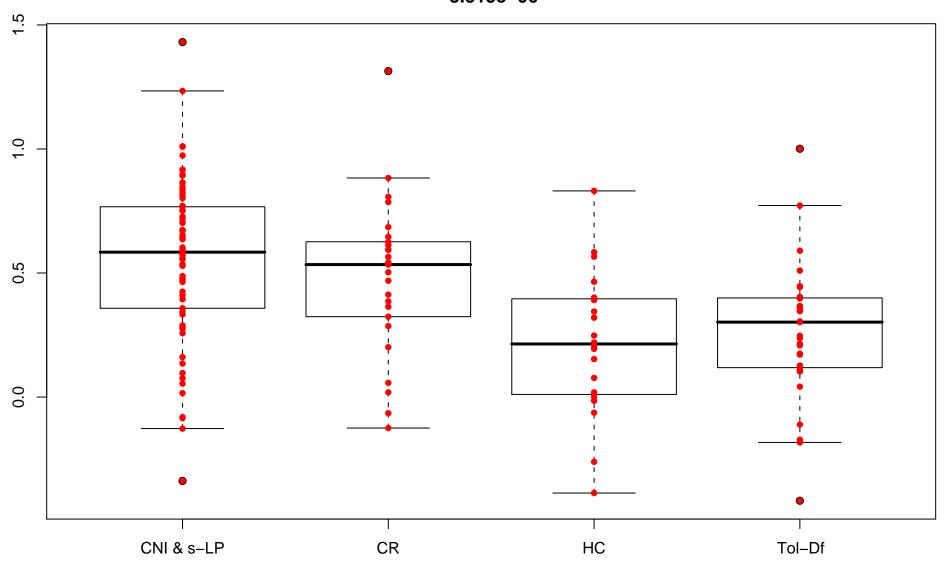
Rank 158 : CCL23 3.205e-06



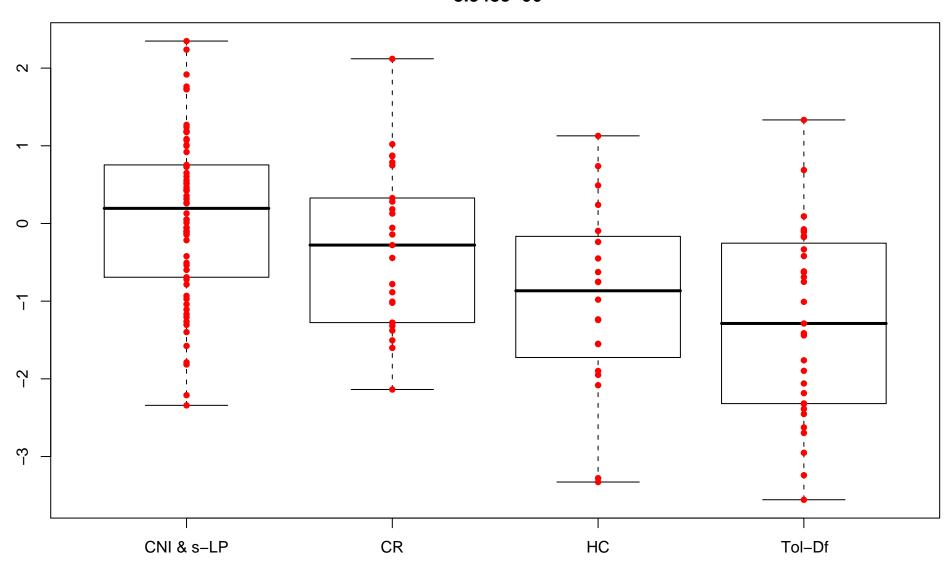
Rank 159 : PSCD1 3.254e-06



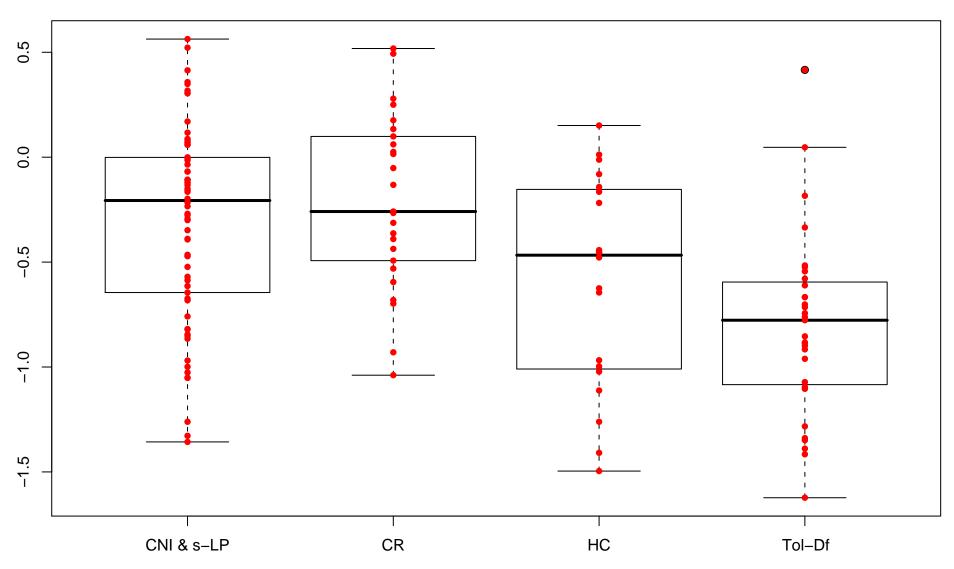
Rank 160 : CTSD 3.315e-06



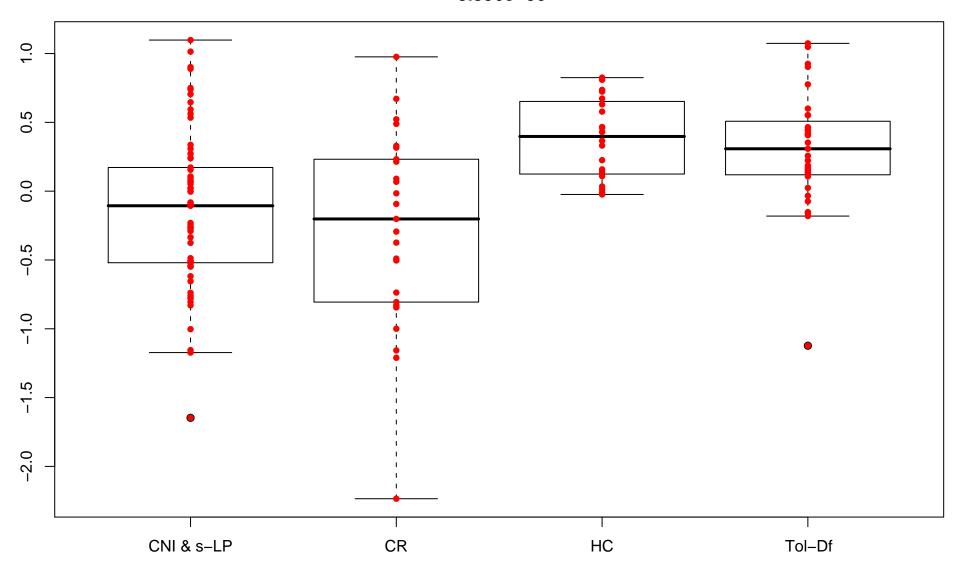
Rank 161 : SLC26A8 3.348e-06



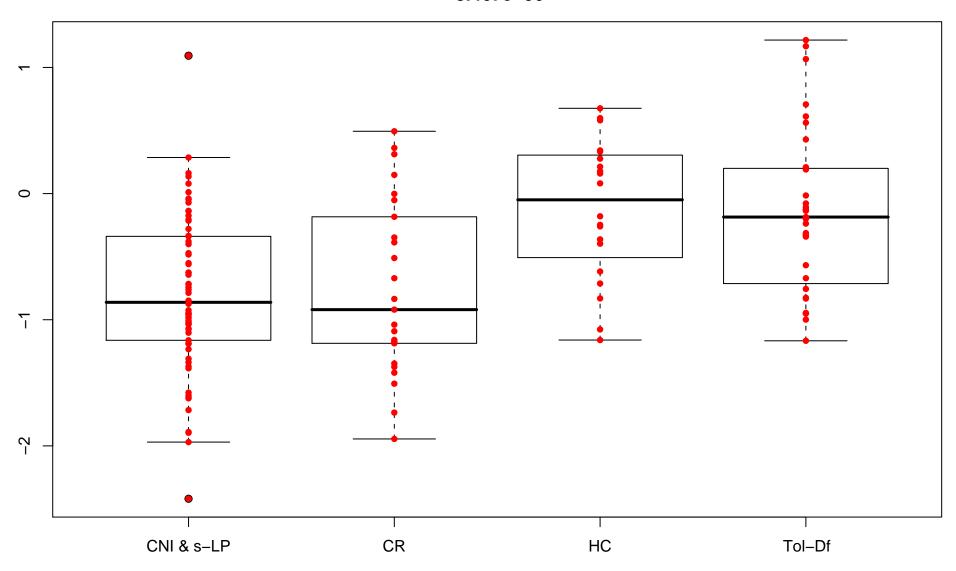
Rank 162 : PDLIM7 3.385e-06



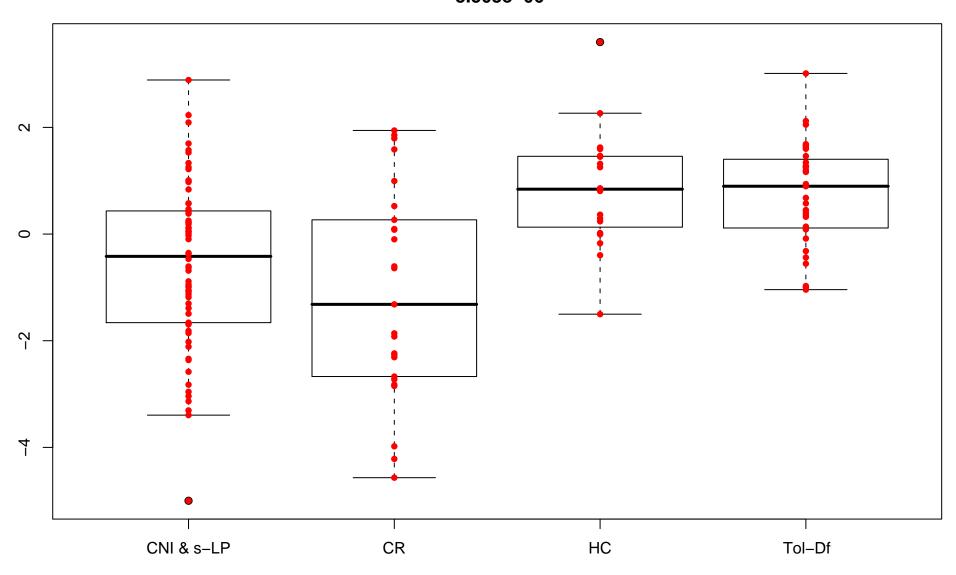
Rank 163 : CASD1 3.396e-06



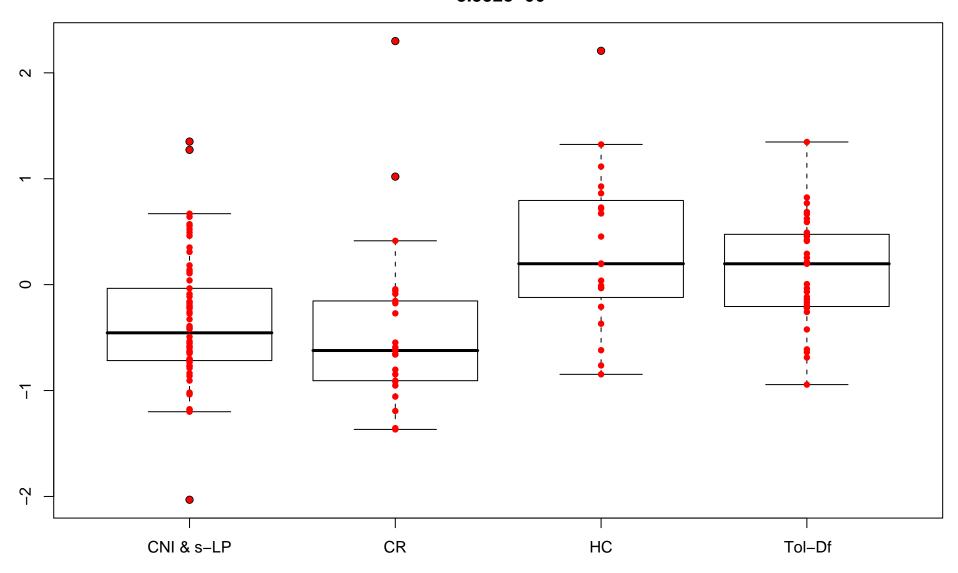
Rank 164 : BEX5 3.467e-06



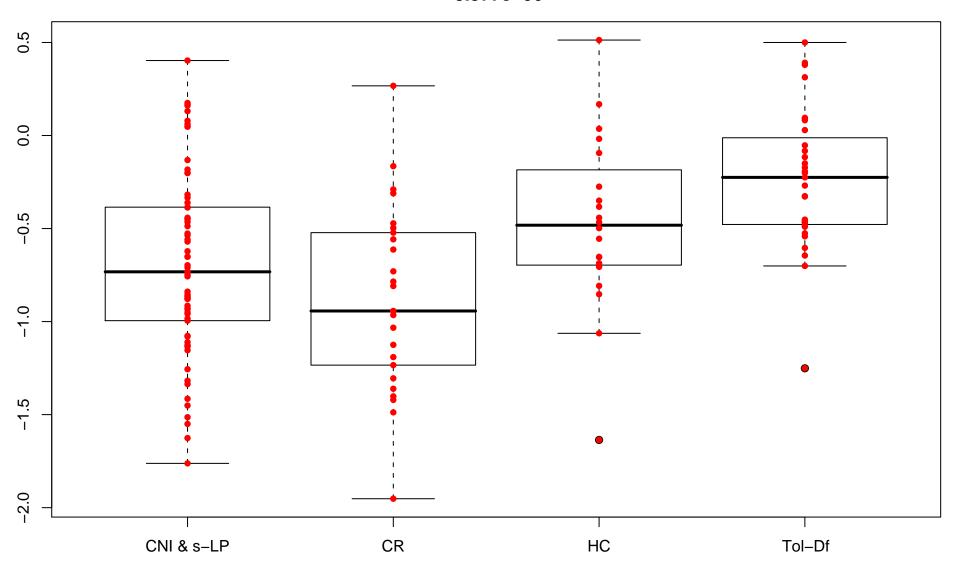
Rank 165 : ENST00000322032 3.503e-06



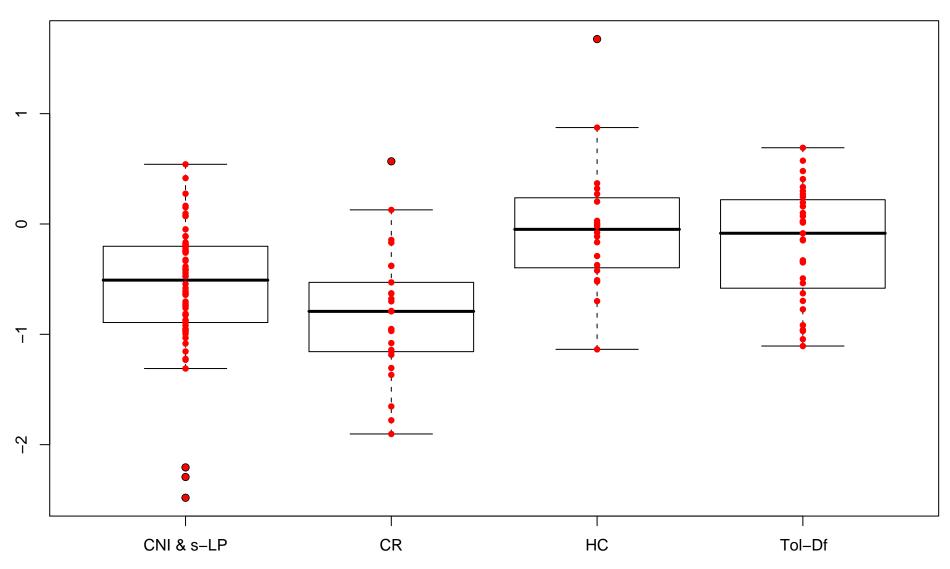
Rank 166 : SLC29A1 3.552e-06



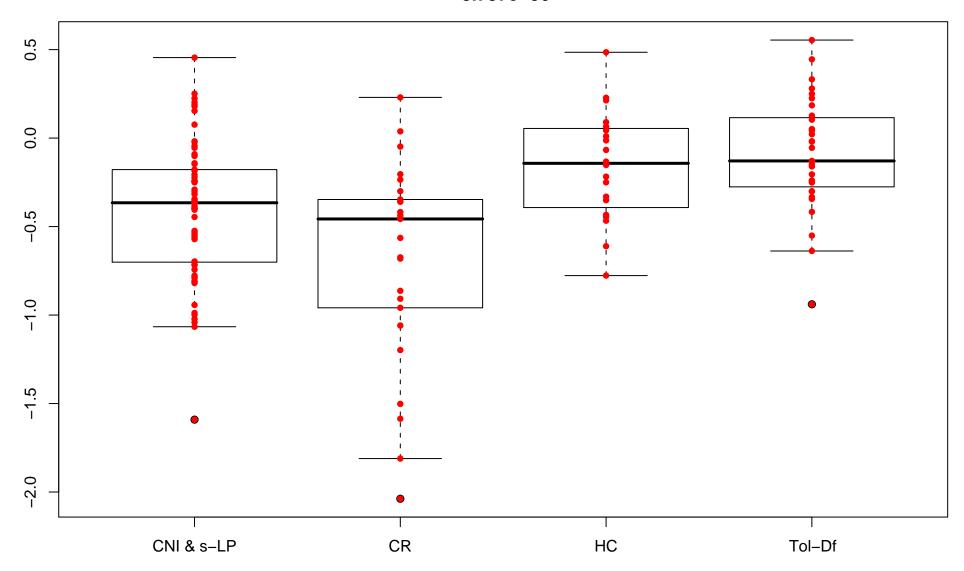
Rank 167 : HSPE1 3.577e-06



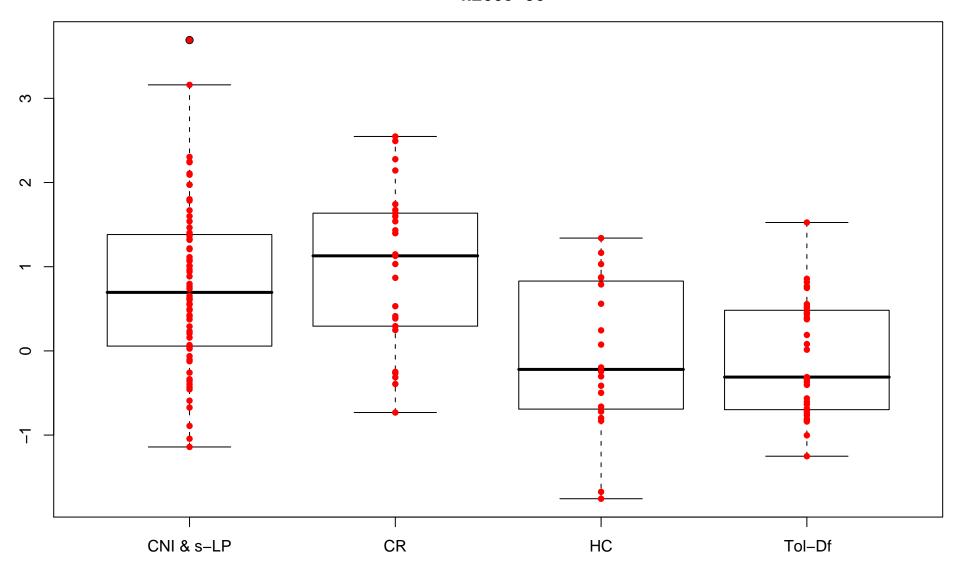
Rank 168 : KLRB1 3.654e-06



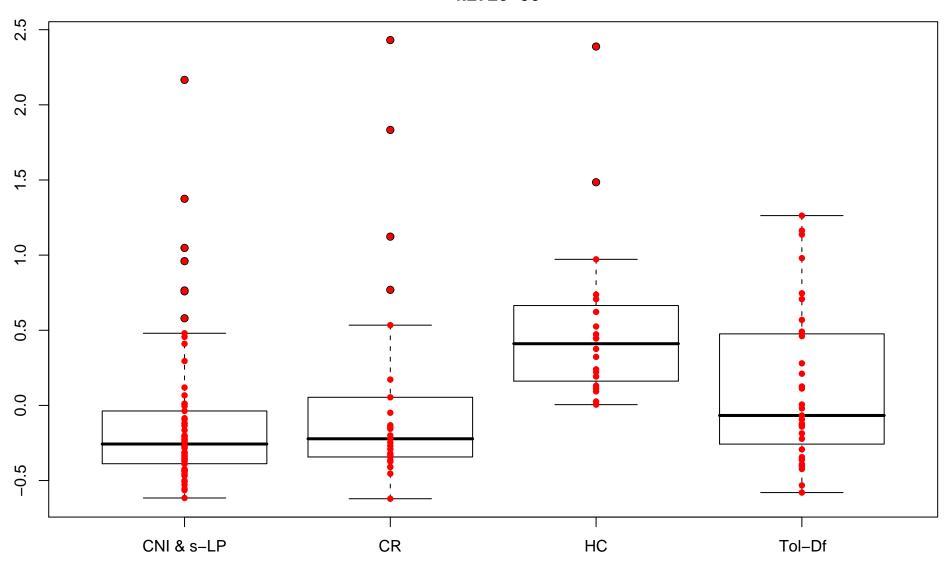
Rank 169 : SLC41A1 3.757e-06



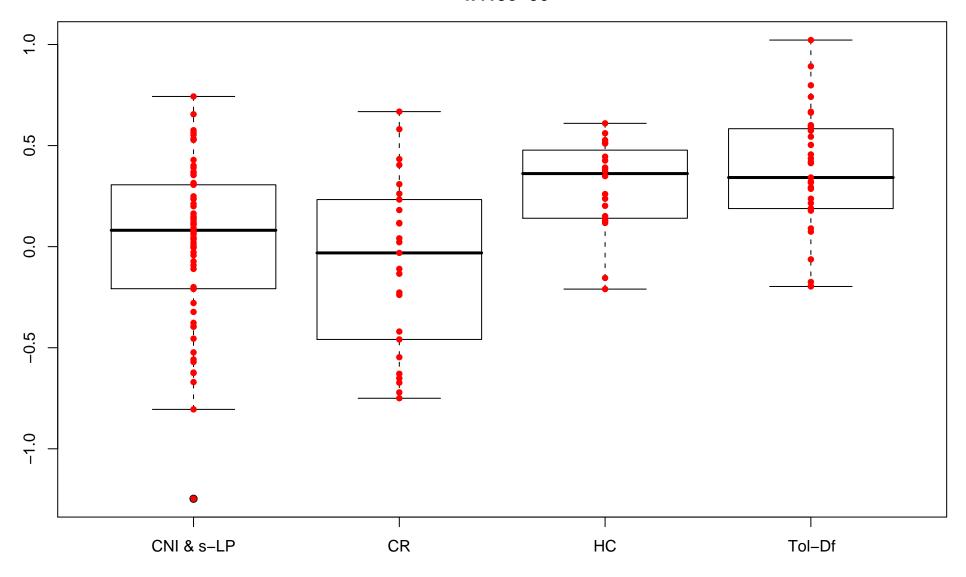
Rank 170 : FZD5 4.266e-06



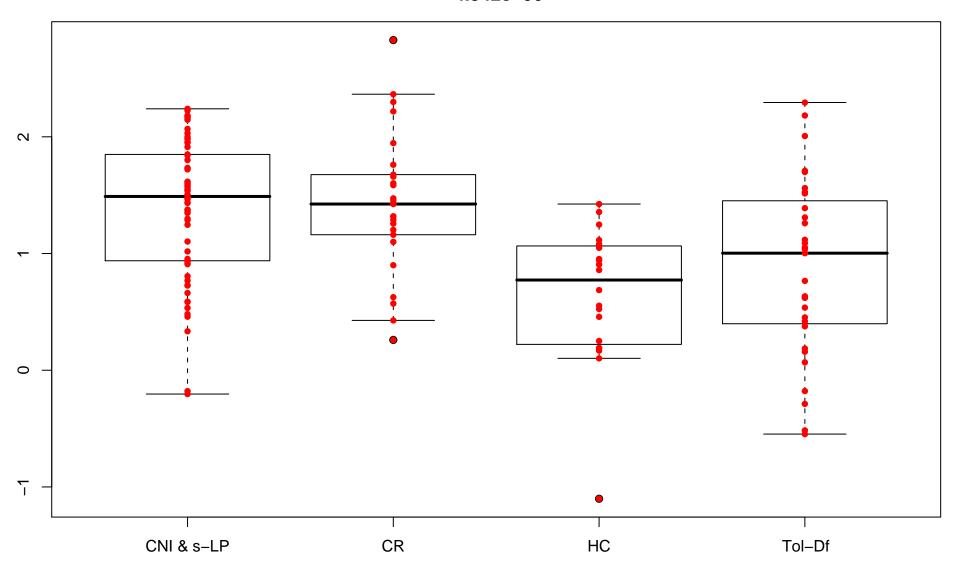
Rank 171 : AK094477 4.272e-06



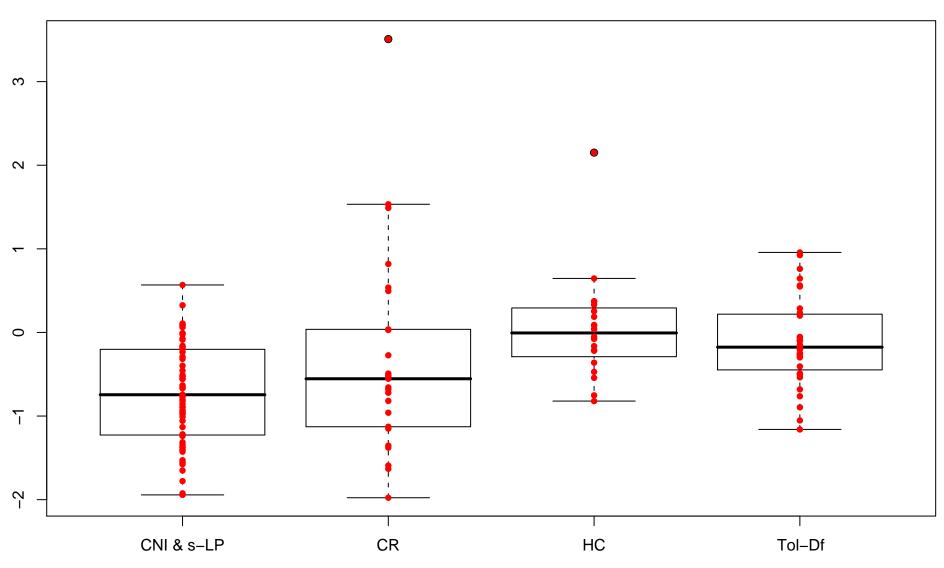
Rank 172 : ETAA1 4.419e-06



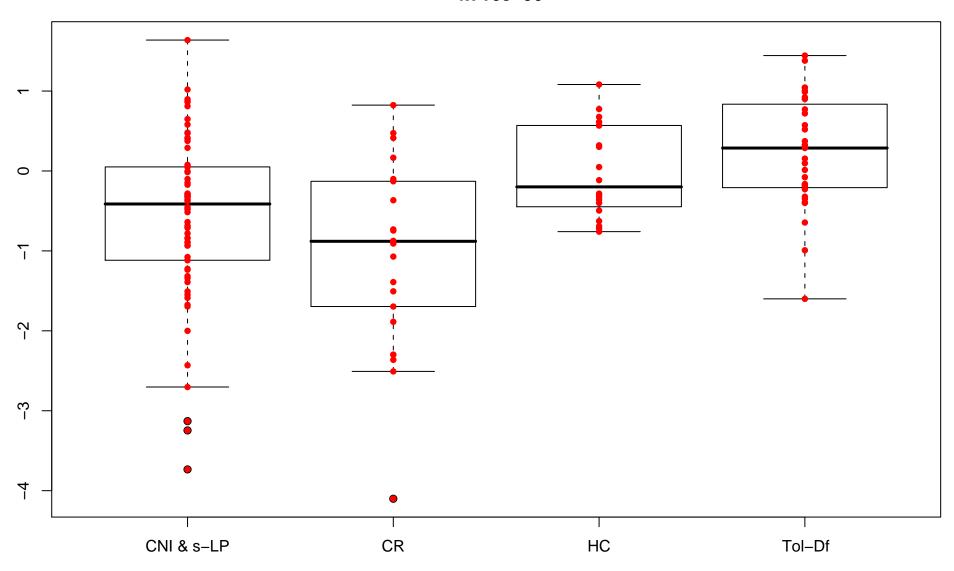
Rank 173 : CA433167 4.542e-06



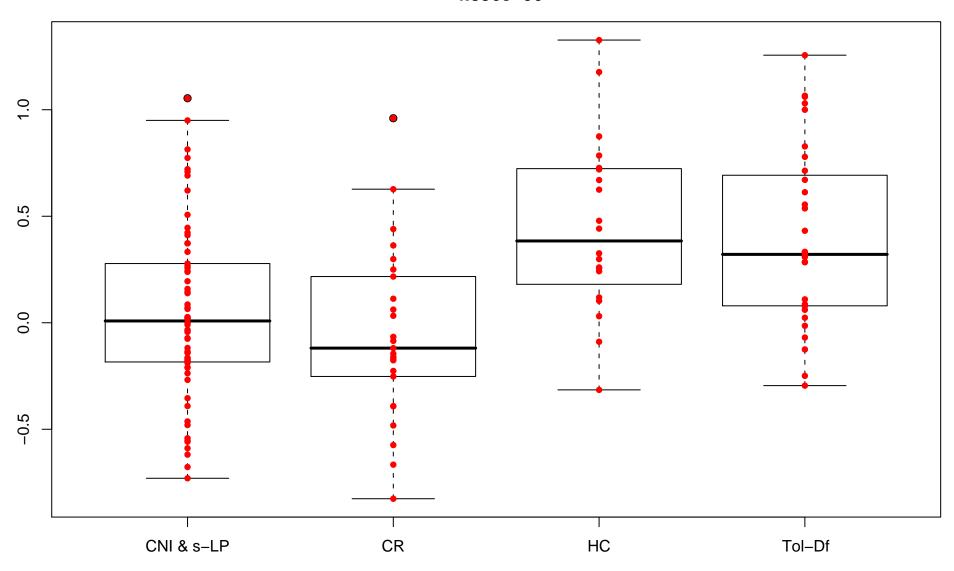
Rank 174 : STAG3 4.574e-06



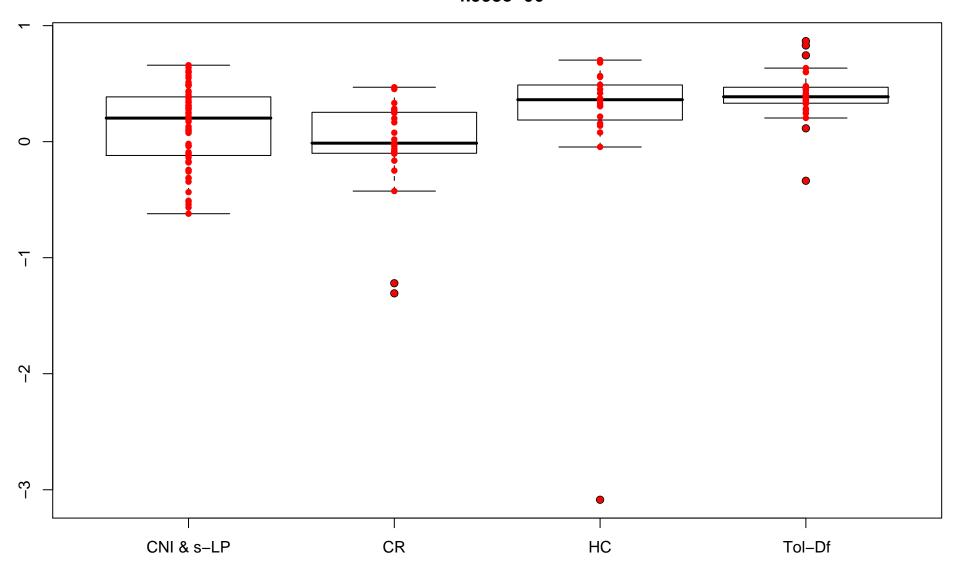
Rank 175 : C6ORF105 4.716e-06



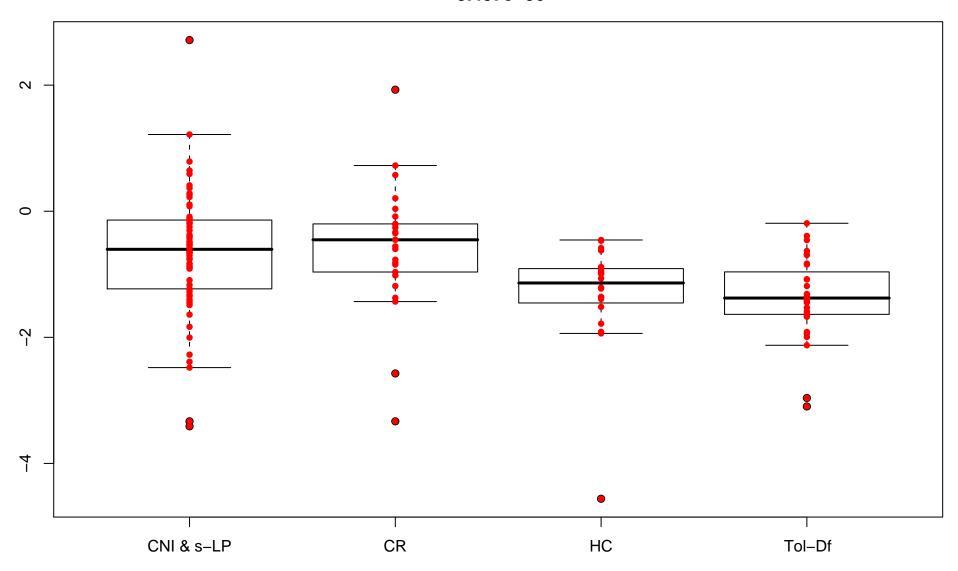
Rank 176 : BEX4 4.836e-06



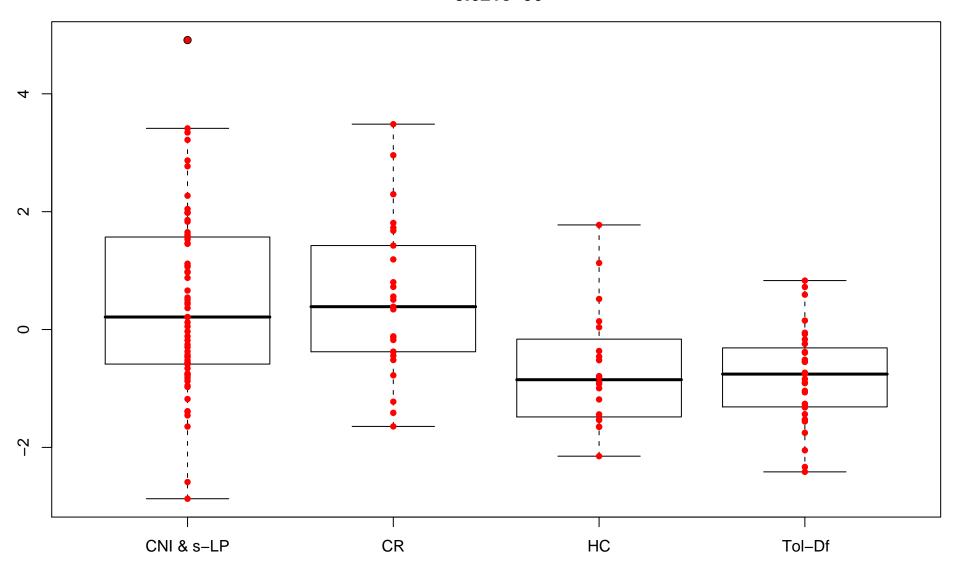
Rank 177 : PPWD1 4.993e-06



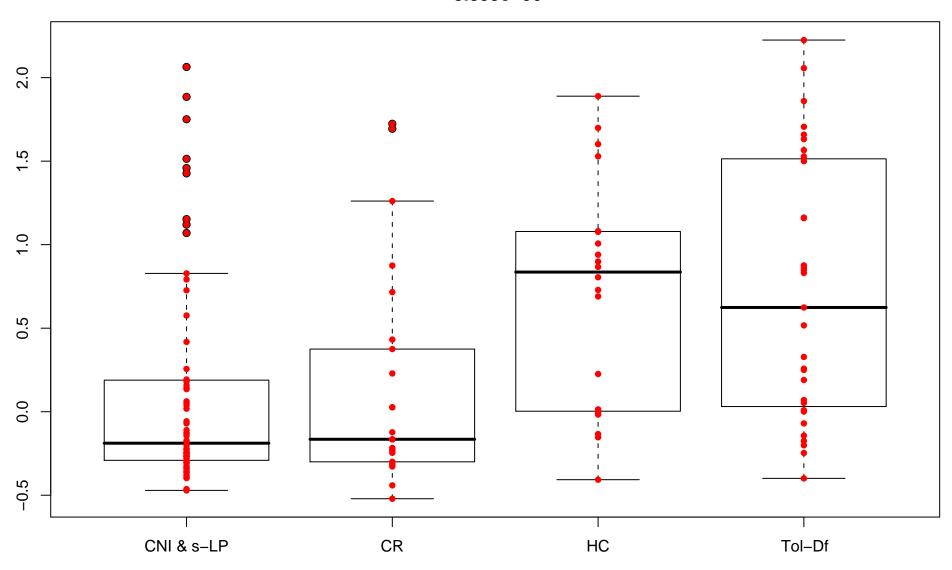
Rank 178 : RNASE2 5.457e-06



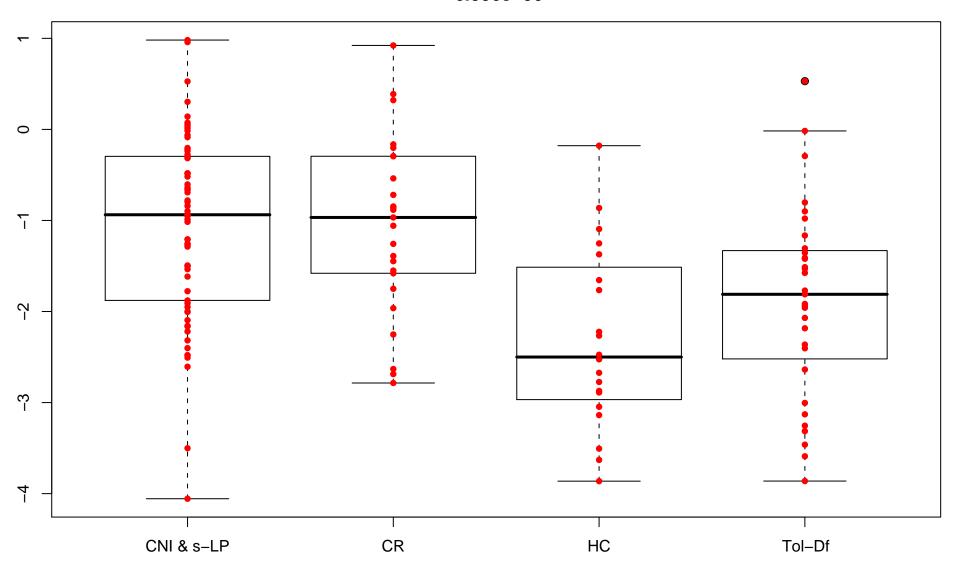
Rank 179: INHBA 5.621e-06



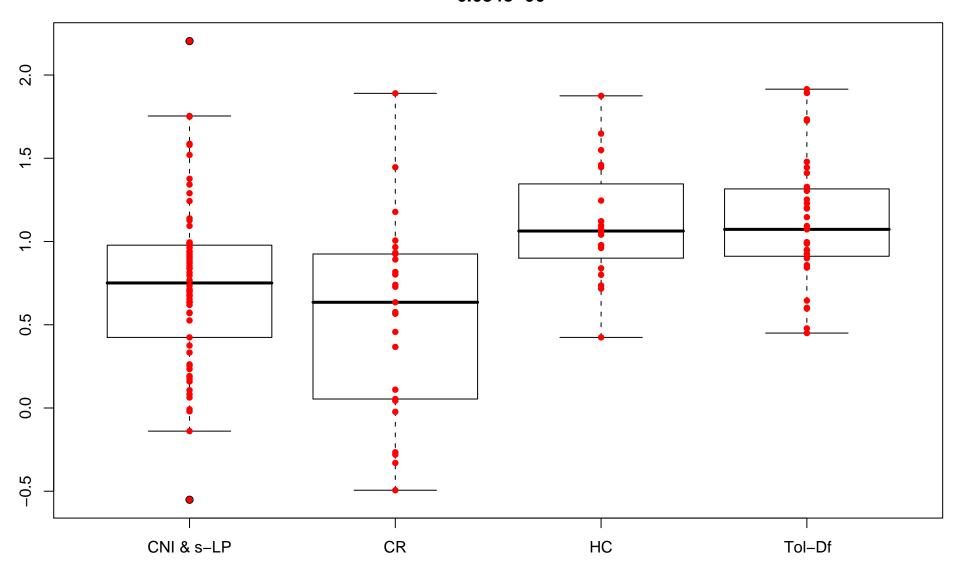
Rank 180 : SPRY1 5.899e-06



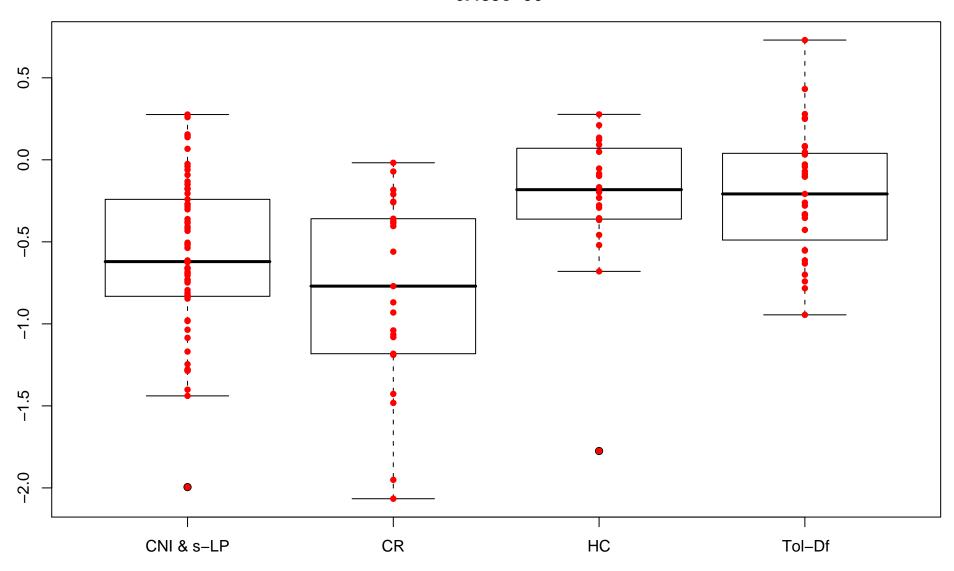
Rank 181 : THC2349739 6.006e-06



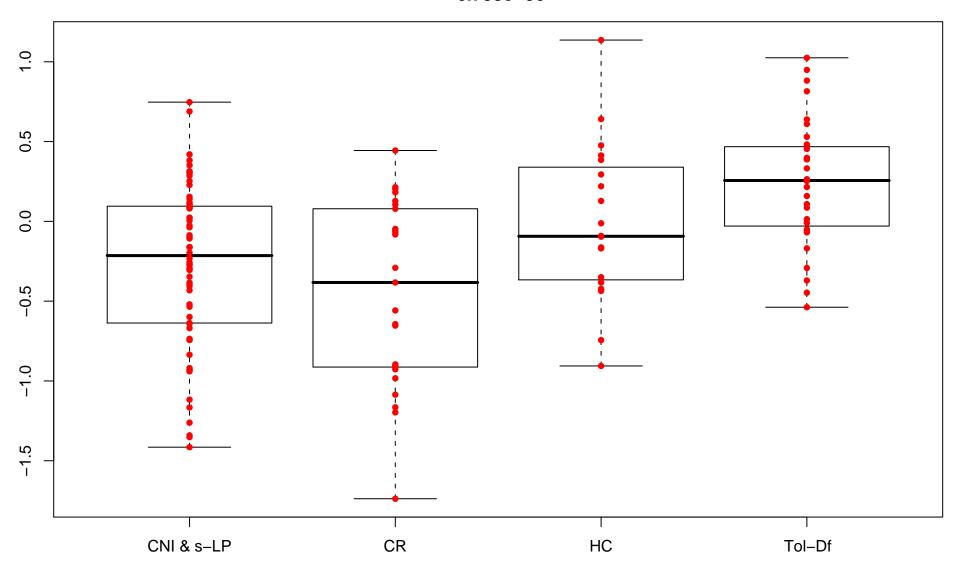
Rank 182 : RECK 6.034e-06



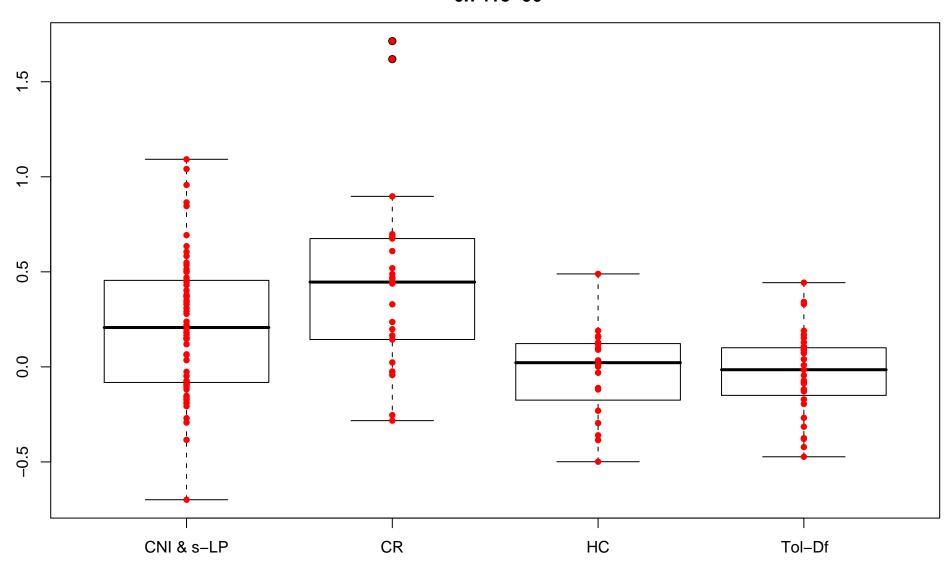
Rank 183 : ARID5B 6.489e-06



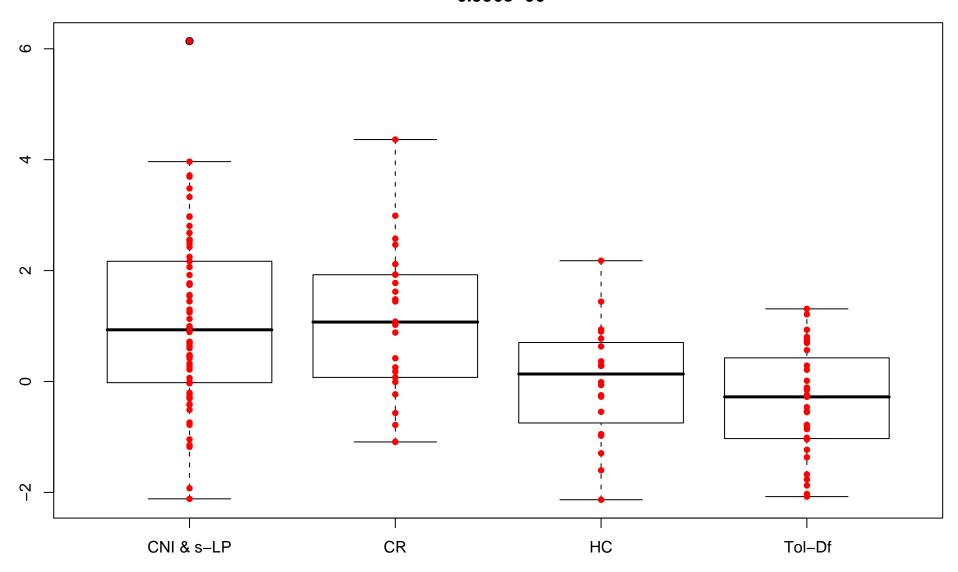
Rank 184 : RPS27A 6.738e-06



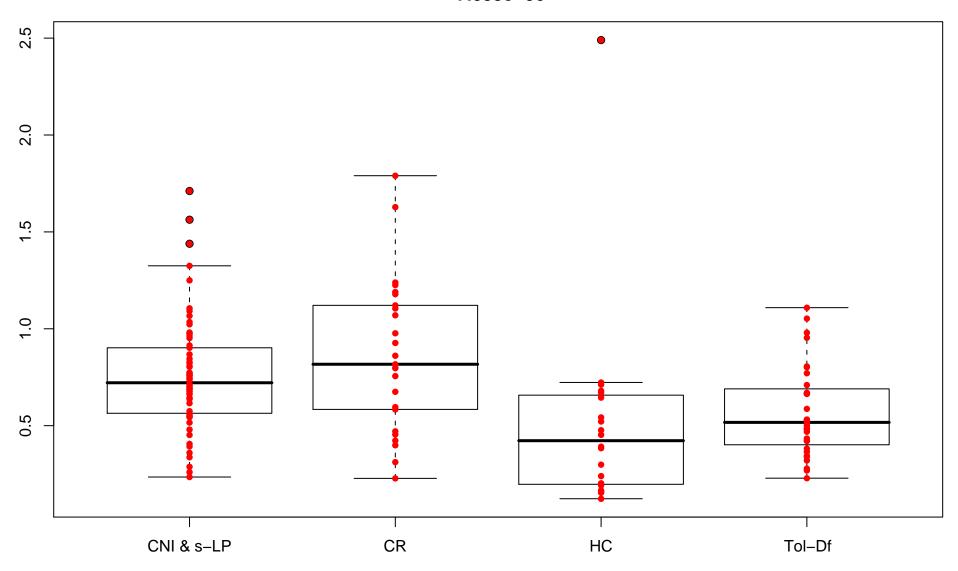
Rank 185 : ATXN3 6.741e-06



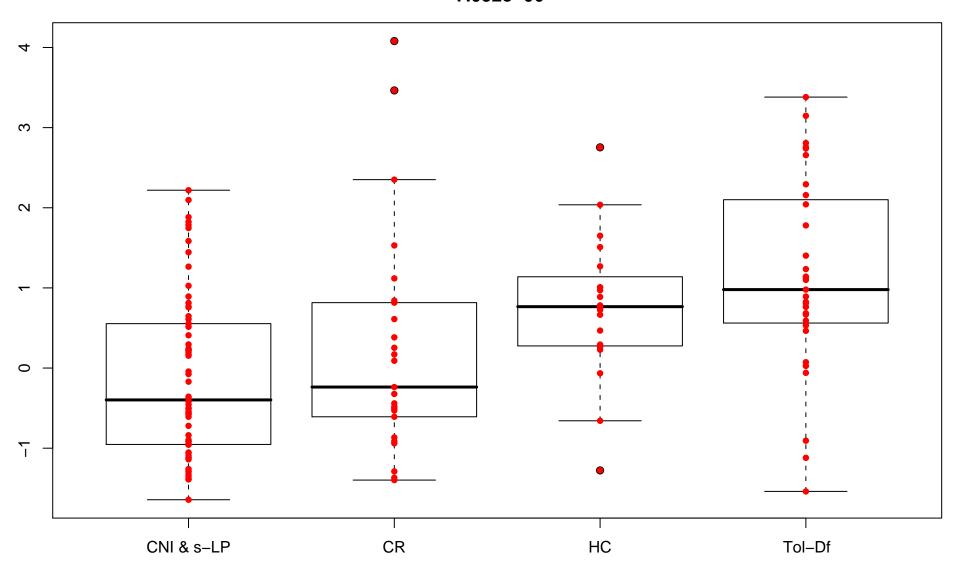
Rank 186 : ELA2 6.996e-06



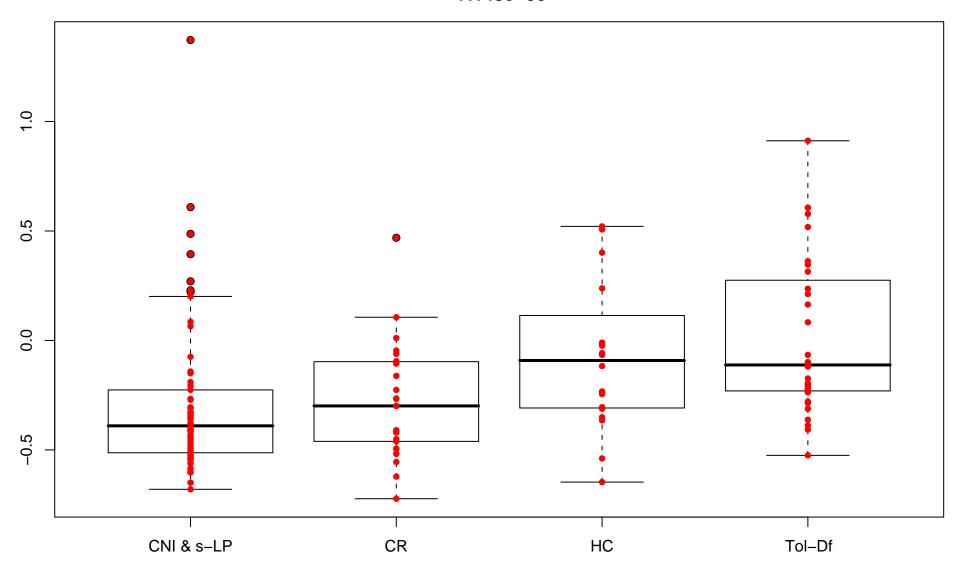
Rank 187 : DENND1A 7.033e-06



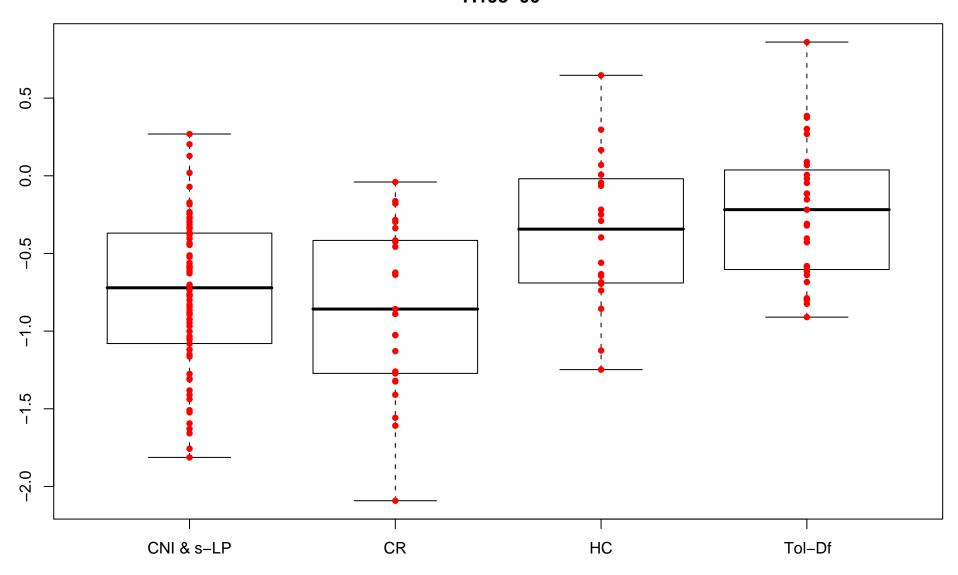
Rank 188 : CELSR1 7.052e-06



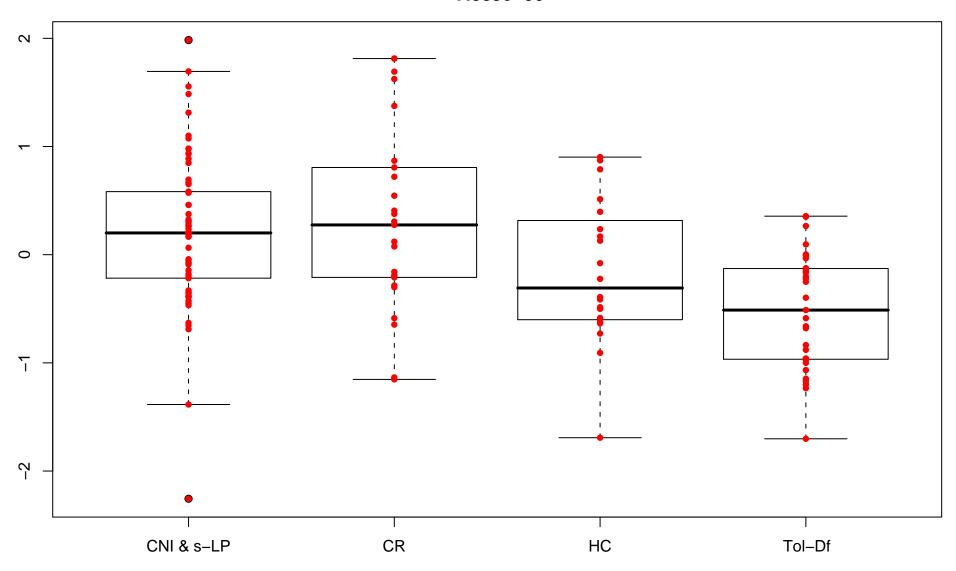
Rank 189 : DDC 7.148e-06



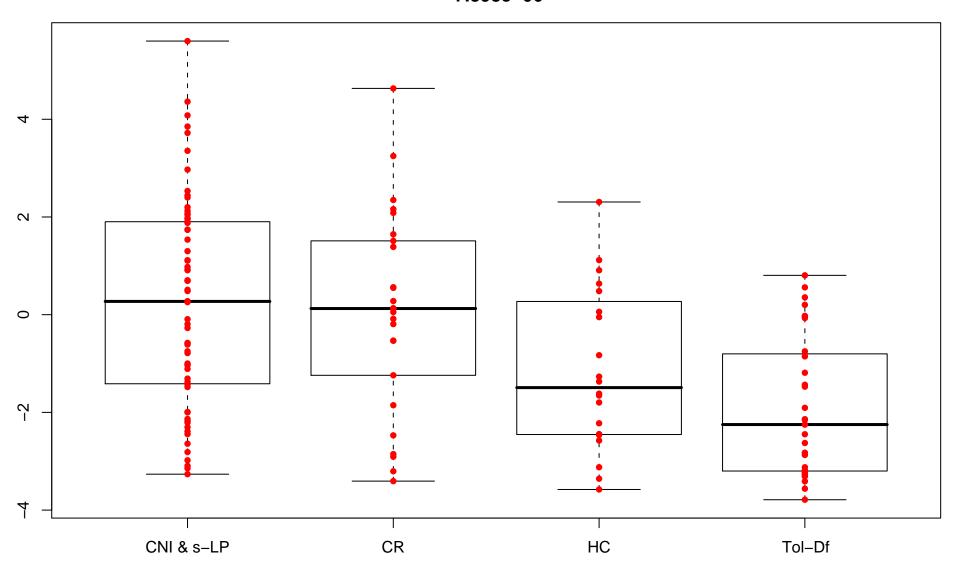
Rank 190: RPL35;LOC390876;LOC440737;HCG\_1983332 7.19e-06



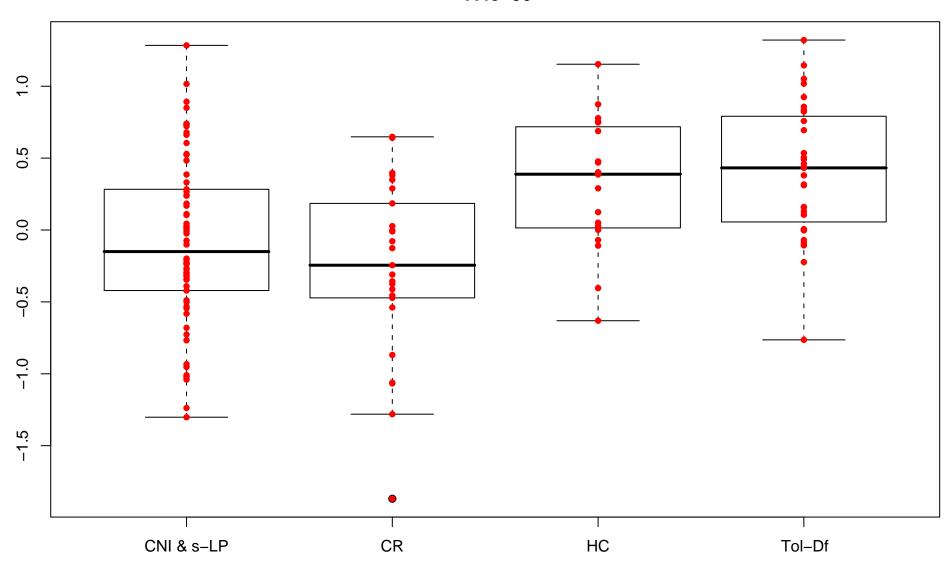
Rank 191 : MAN1A1 7.389e-06



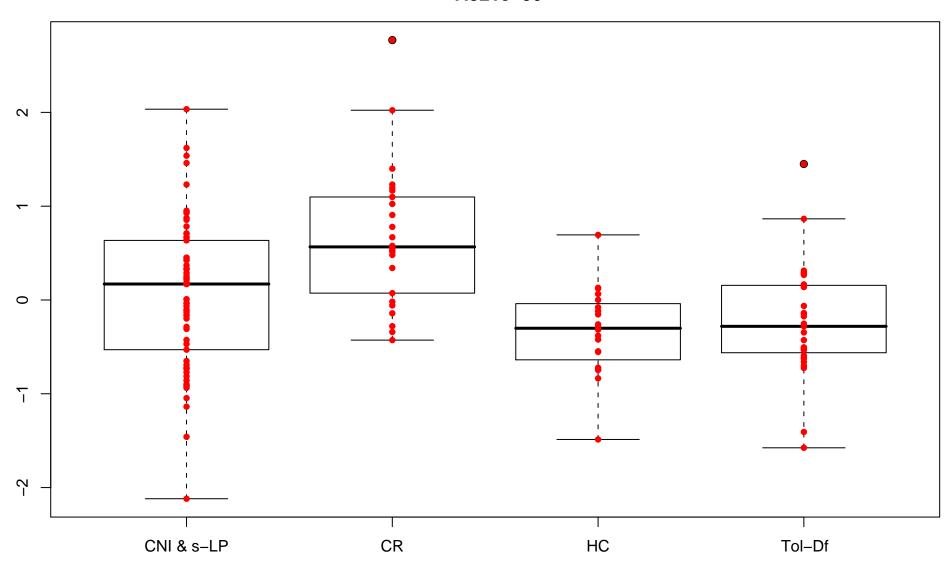
Rank 192 : COL17A1 7.398e-06



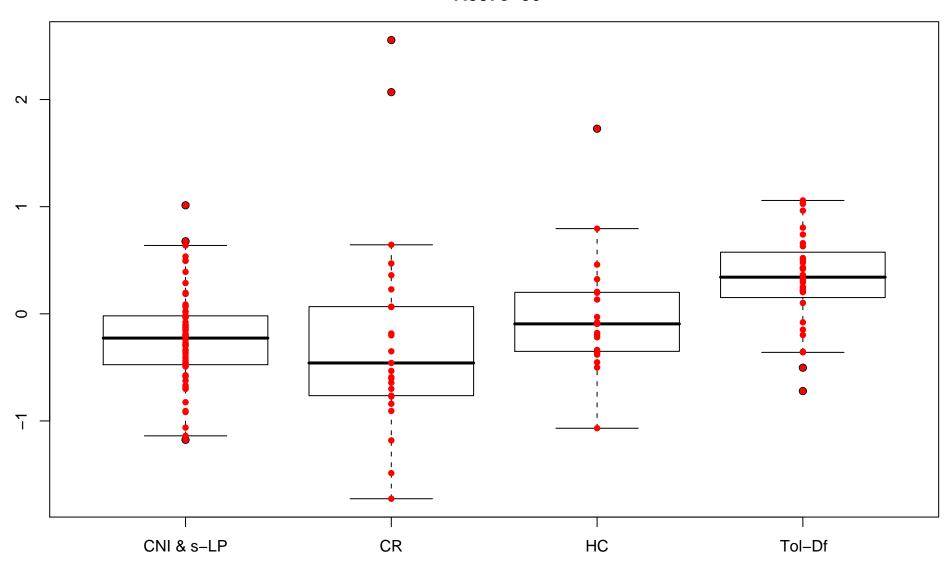
Rank 193 : HSPA8 7.4e-06



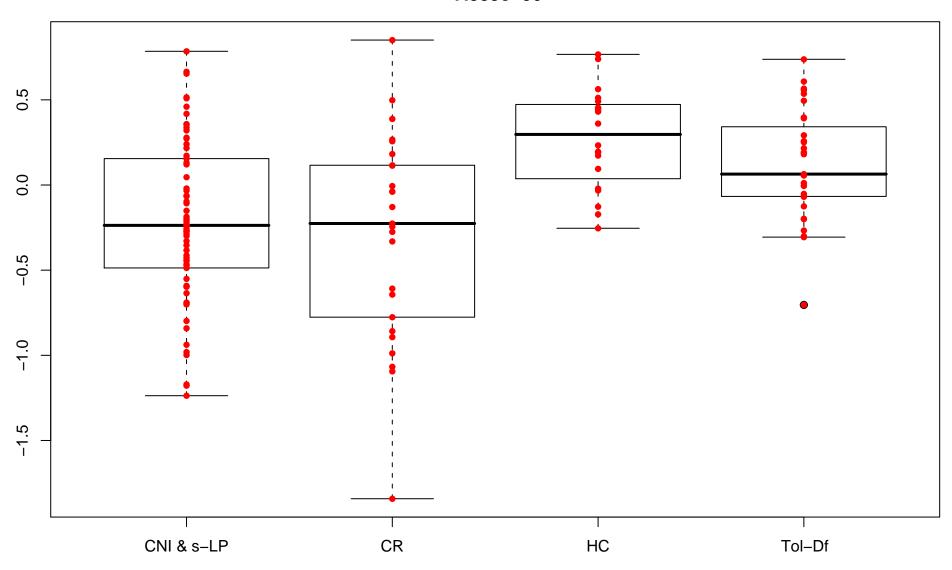
Rank 194 : CXCL9 7.521e-06



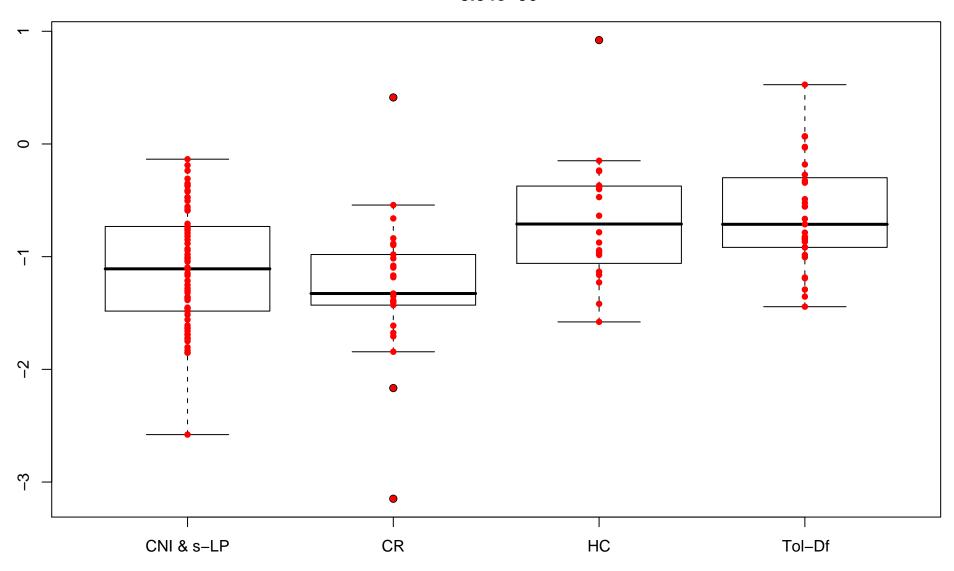
Rank 195 : FADS3 7.537e-06



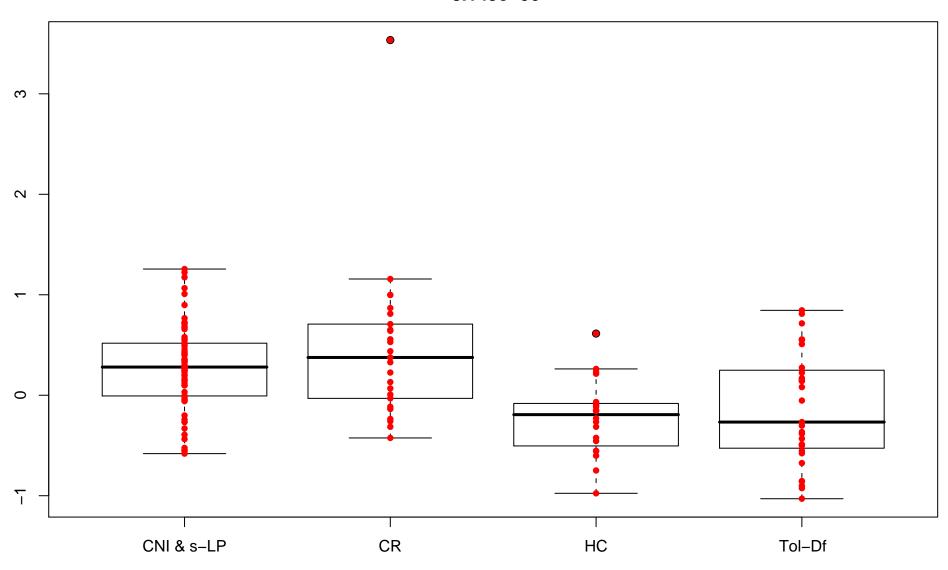
Rank 196 : PDHX 7.559e-06



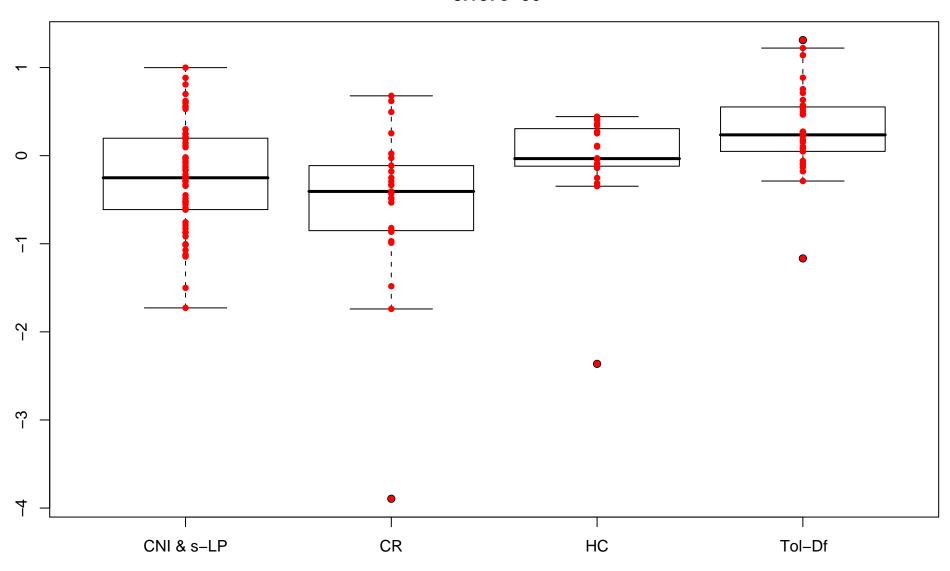
Rank 197 : C12ORF57 8.04e-06



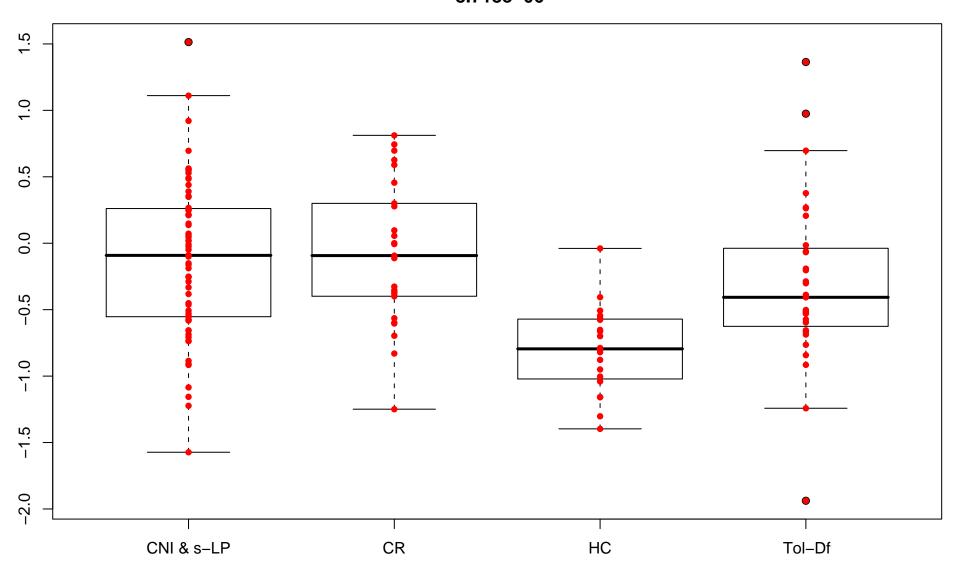
Rank 198: NFAM1 8.149e-06



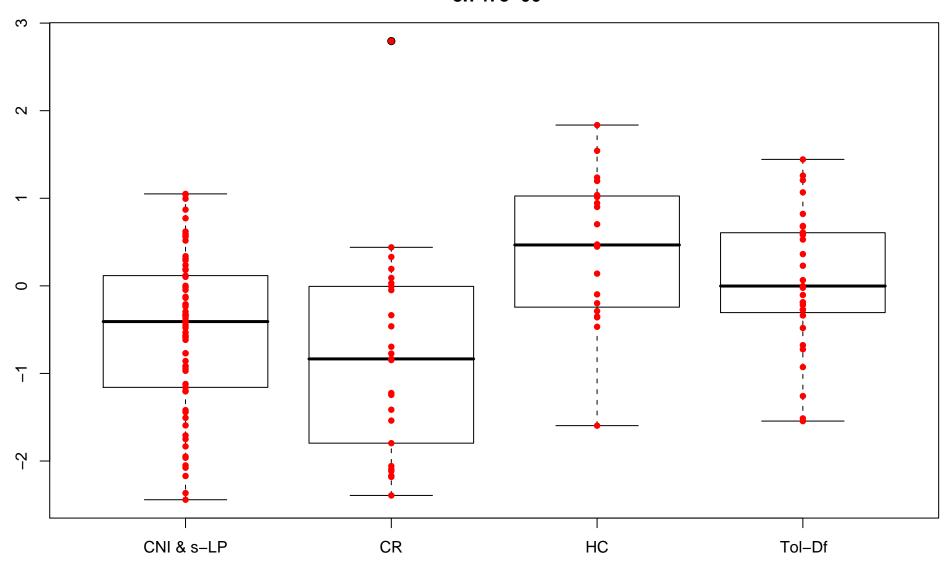
Rank 199 : OXCT1 8.187e-06



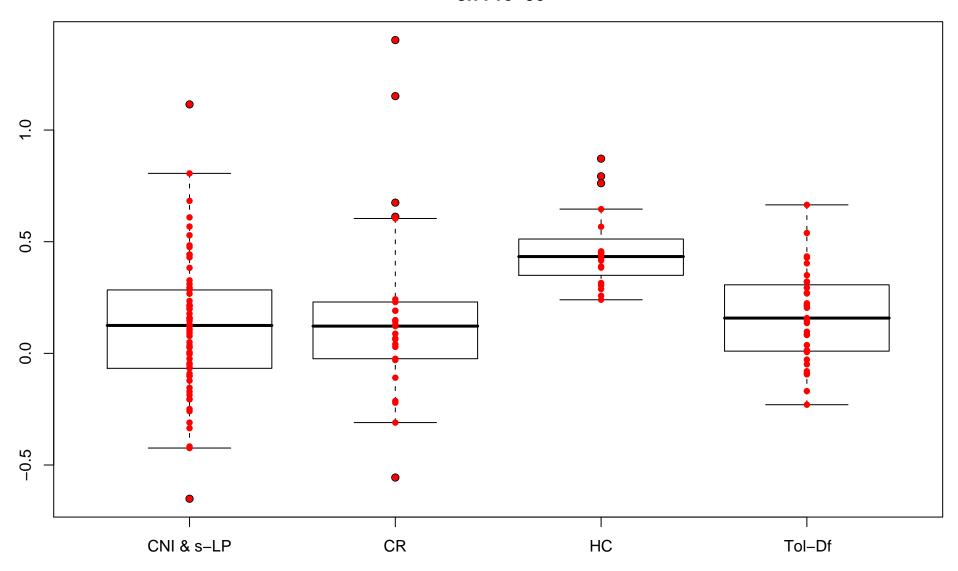
Rank 200 : F7 8.718e-06



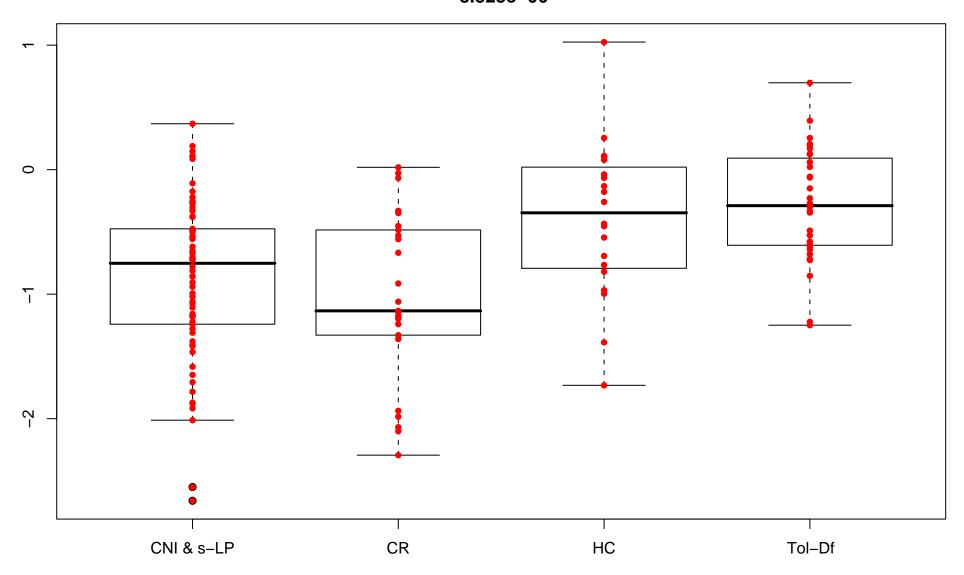
Rank 201 : HRH4 8.747e-06



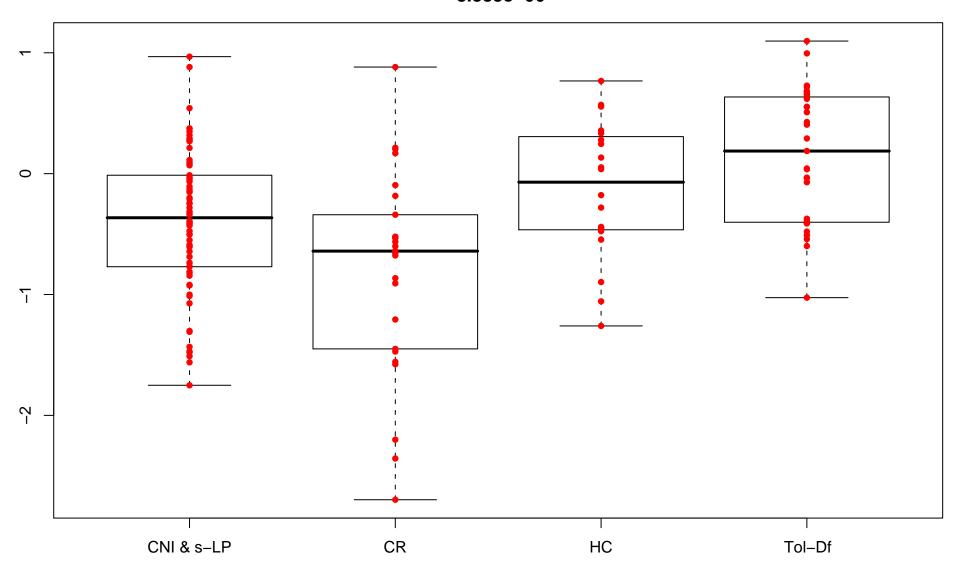
Rank 202 : TNKS 8.771e-06



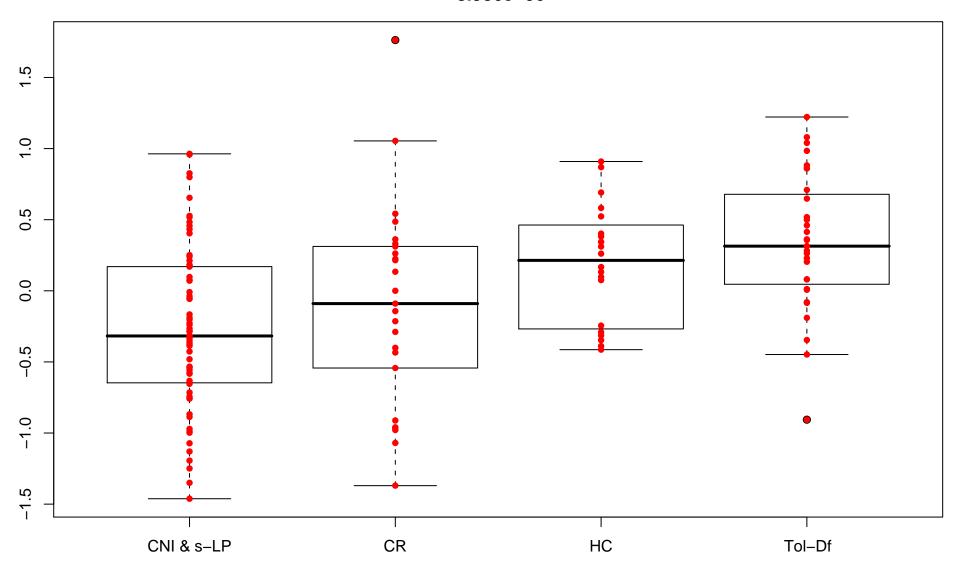
Rank 203 : CD52 8.823e-06



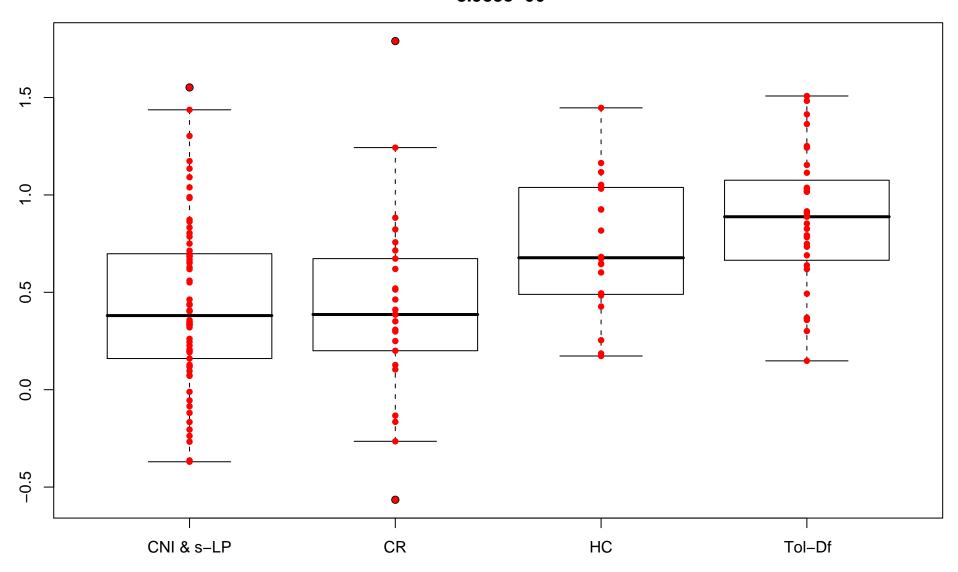
Rank 204 : CD2 8.883e-06



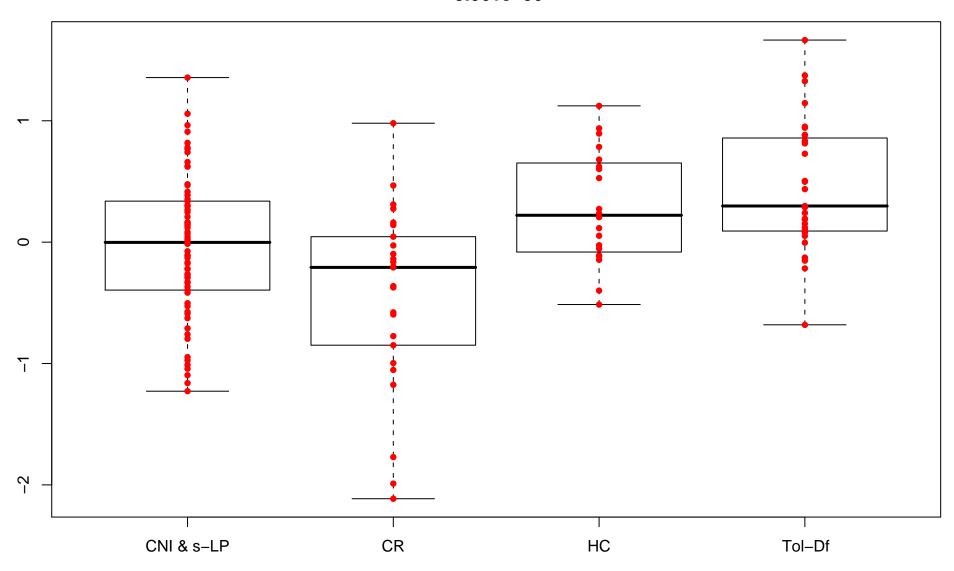
Rank 205 : CD40 8.986e-06



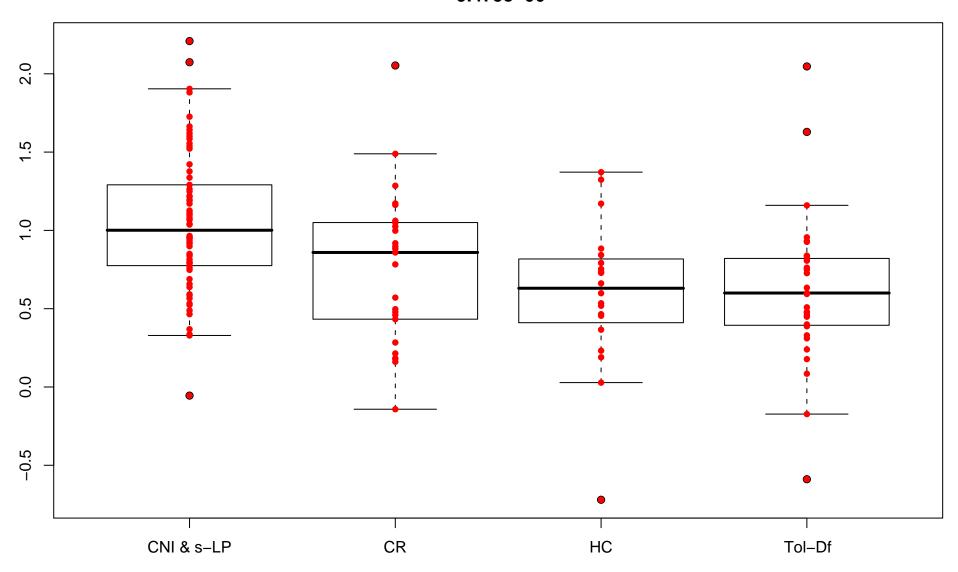
Rank 206 : TCF3 8.988e-06



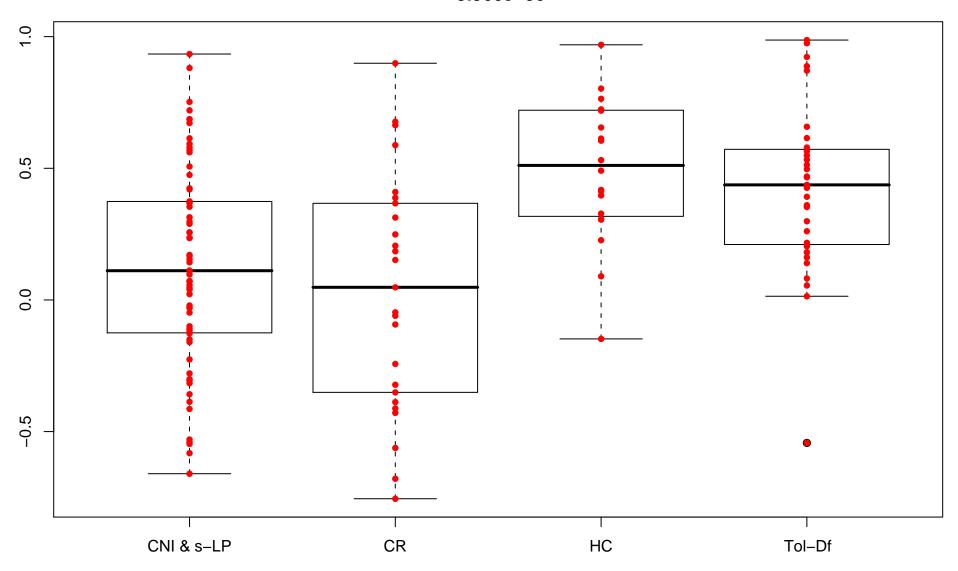
Rank 207 : LCK 9.061e-06



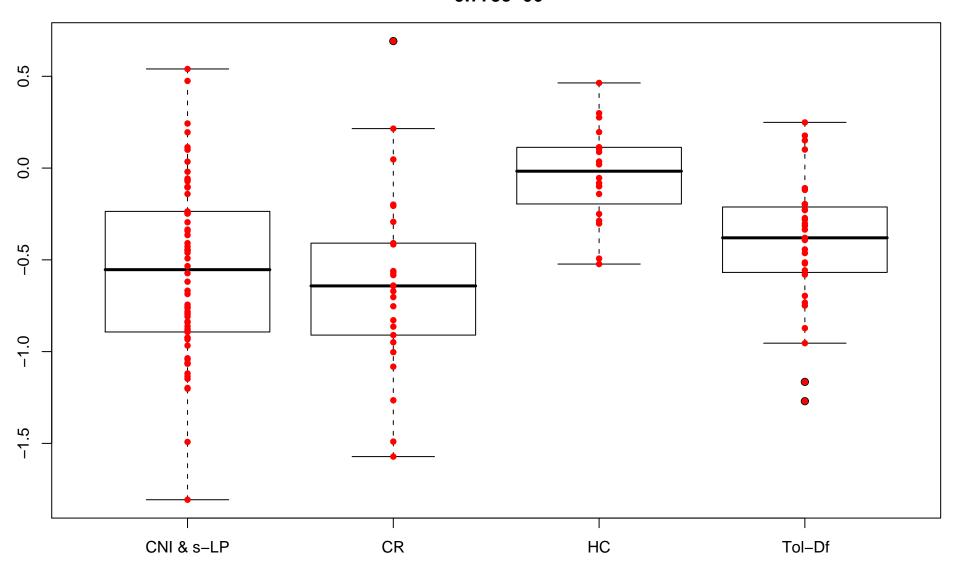
Rank 208 : PFKFB3 9.475e-06



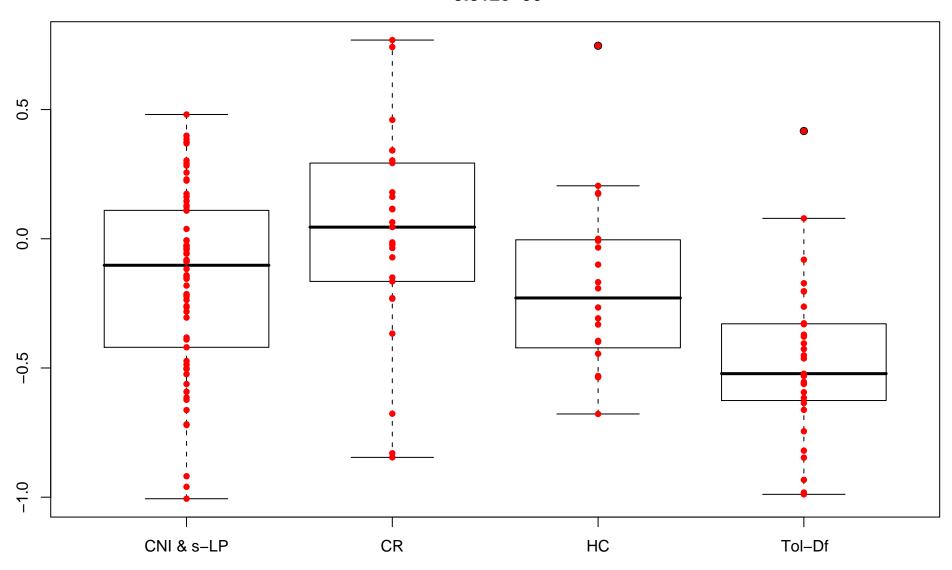
Rank 209 : SFRS10 9.566e-06



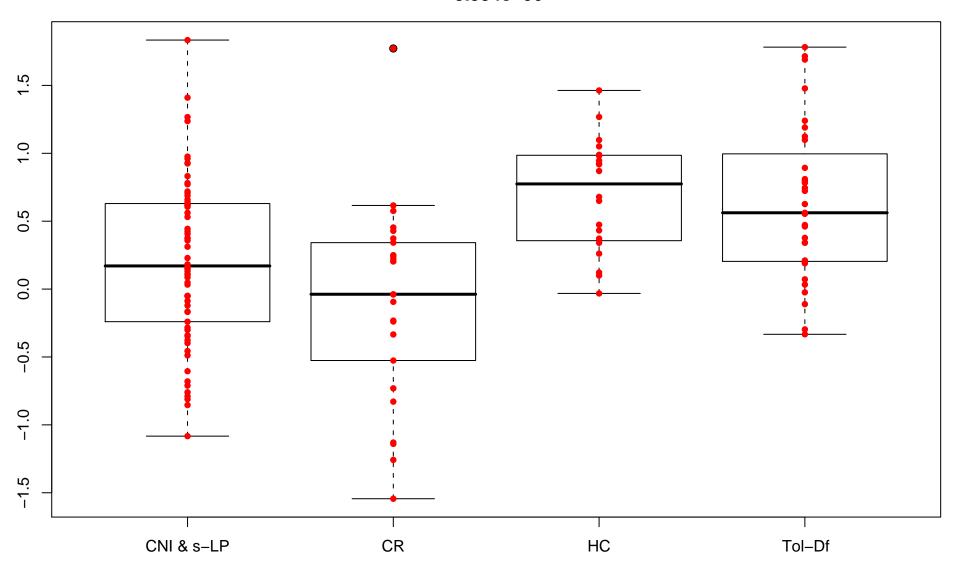
Rank 210 : NMD3 9.775e-06



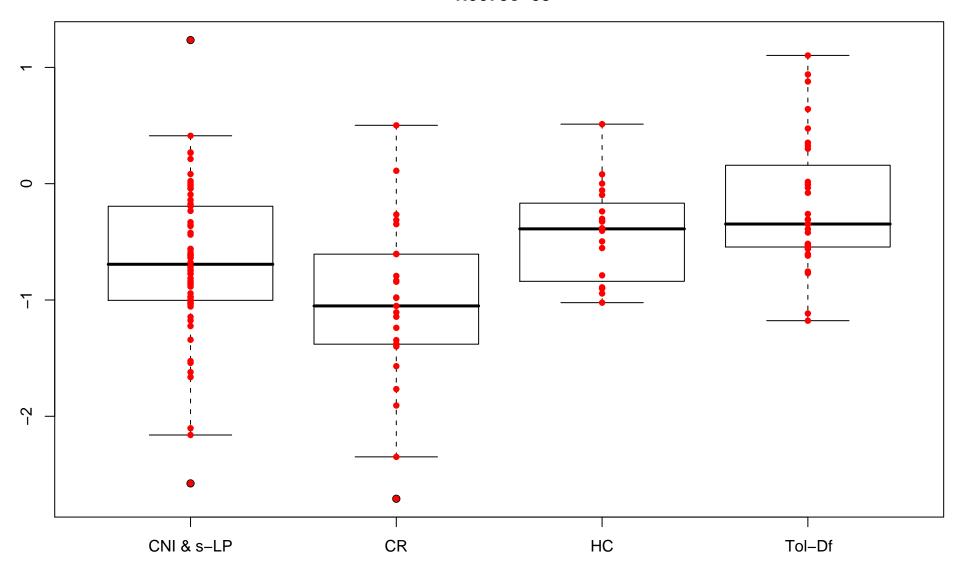
Rank 211 : MEFV 9.812e-06



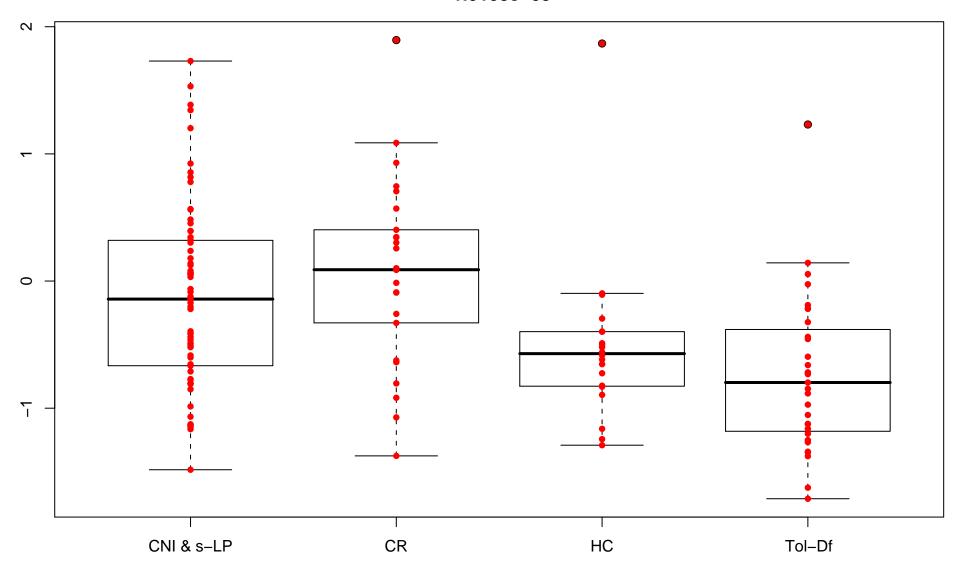
Rank 212 : LIMA1 9.994e-06



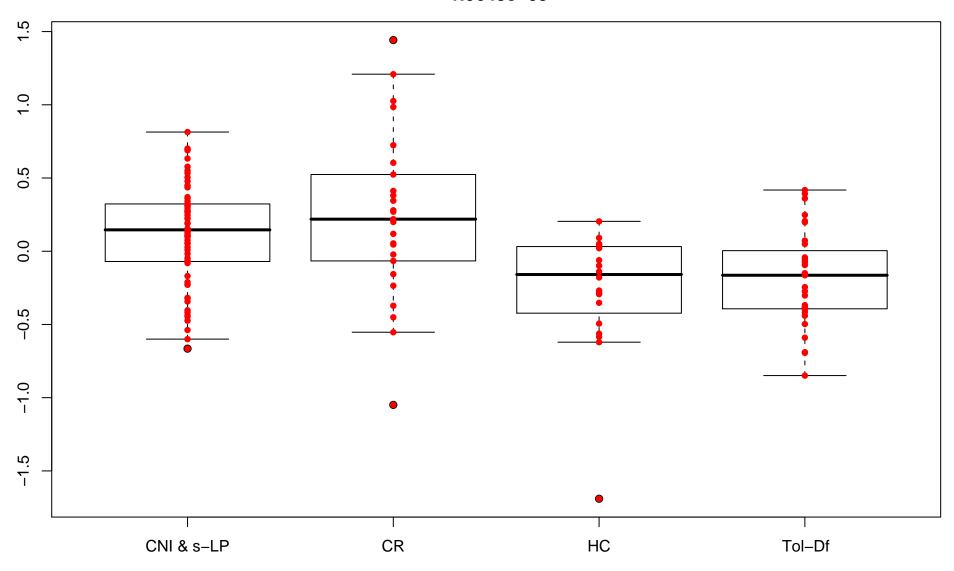
Rank 213 : GZMK 1.0079e-05



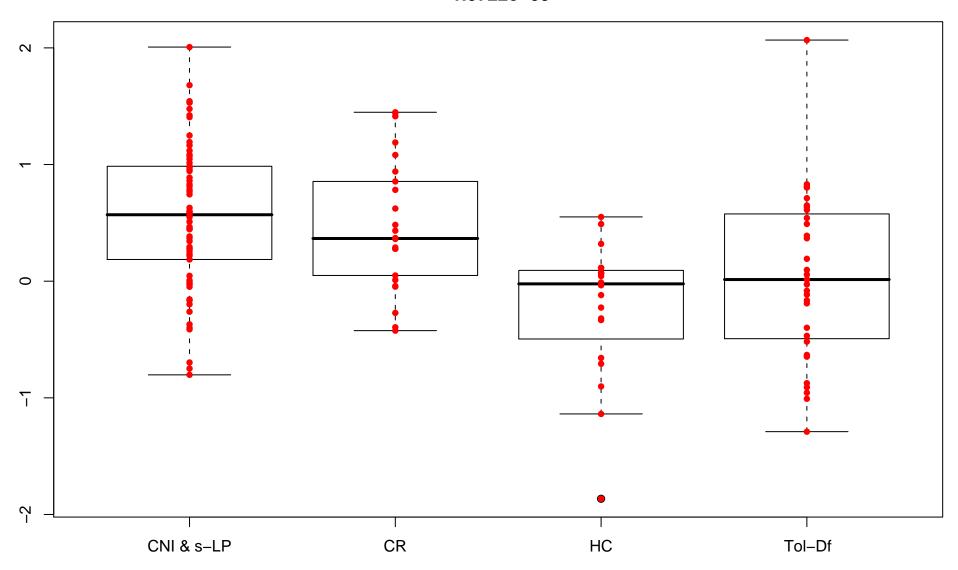
Rank 214 : ASPH 1.0108e-05



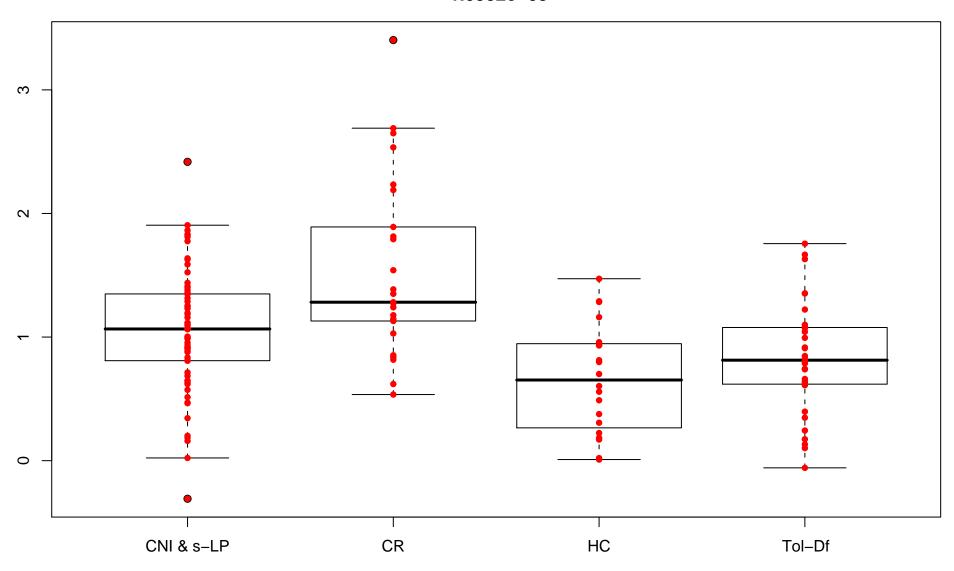
Rank 215 : MS4A6A 1.0643e-05



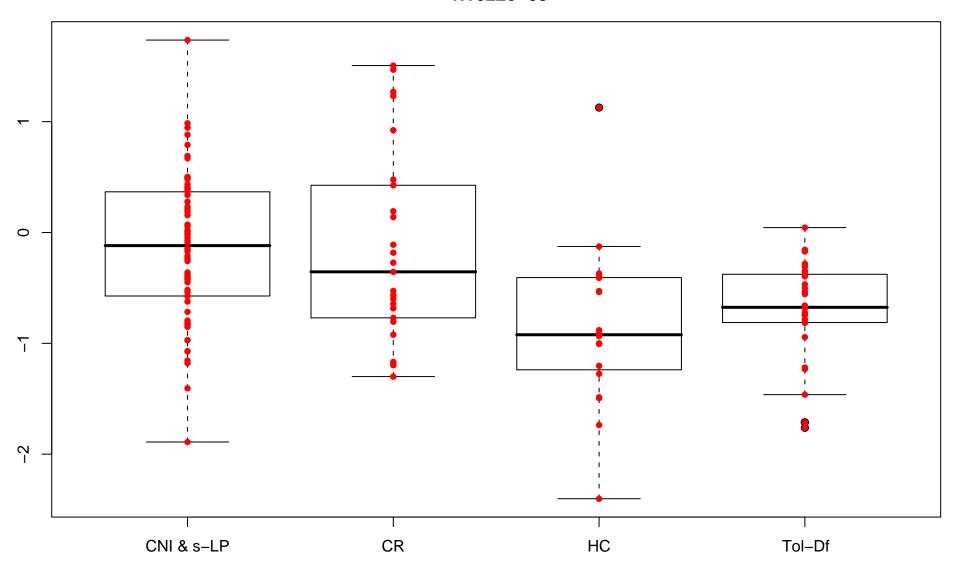
C441124;LOC642788;LOC646301;LOC646434;LOC653056;LOC728100;LOC728417;LOC728728;LOC728790;LOC729 1.0722e-05



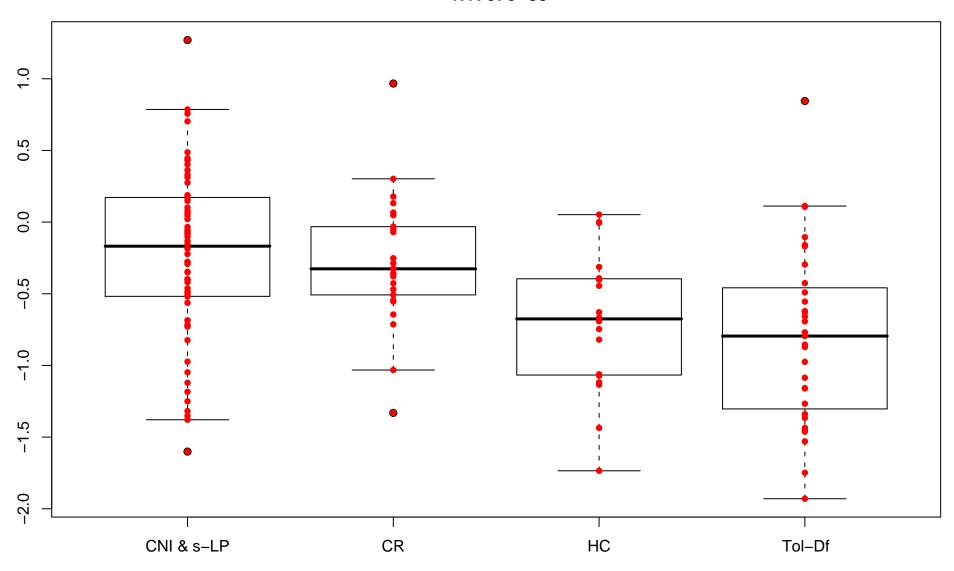
Rank 217 : CCDC18 1.0952e-05



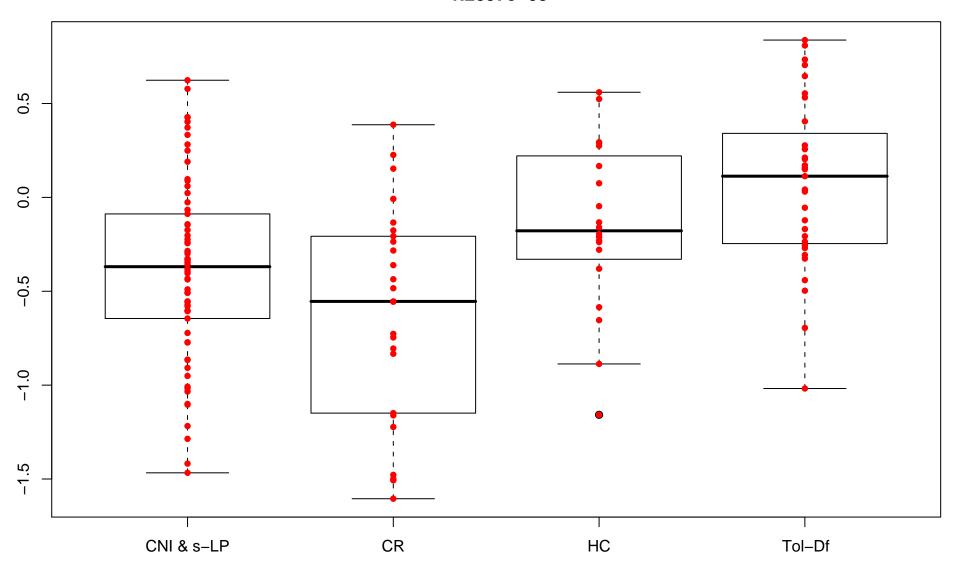
Rank 218 : AIM2 1.1622e-05



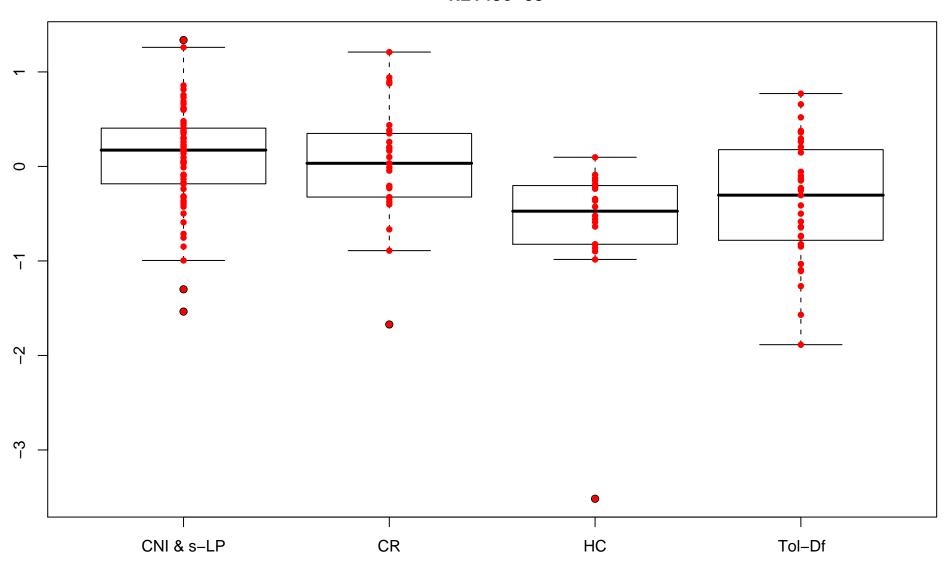
Rank 219 : LOC440731 1.1767e-05



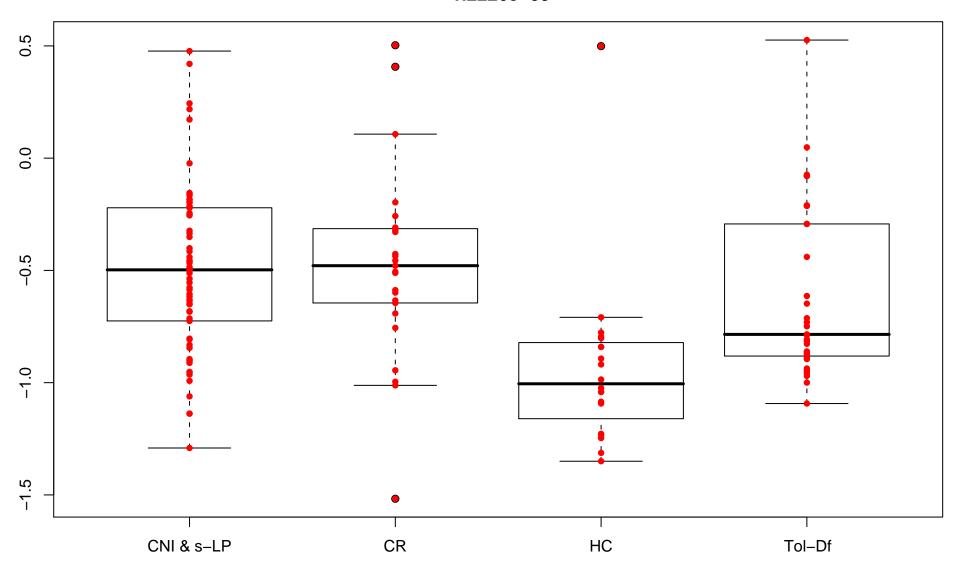
Rank 220 : AKR1B1 1.2097e-05



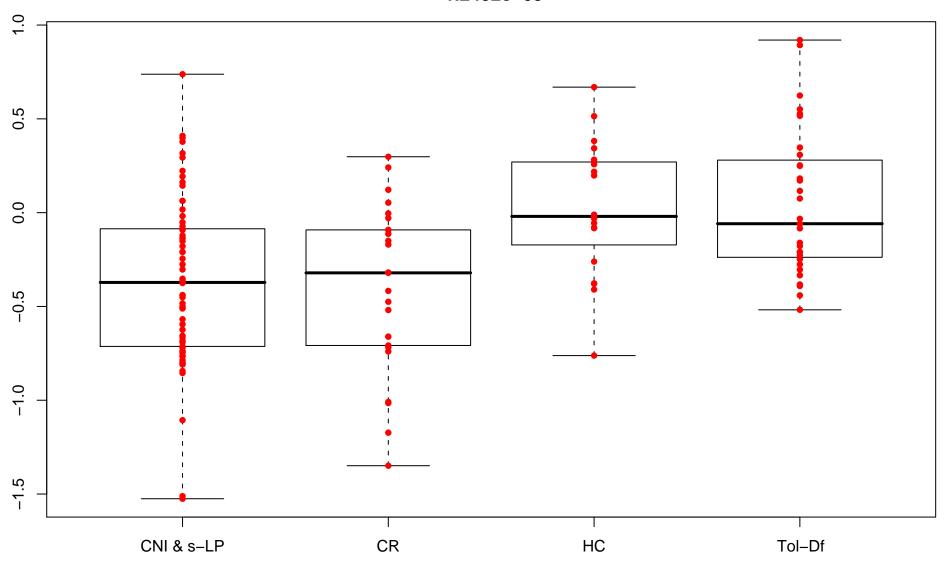
Rank 221 : THC2393621 1.2149e-05



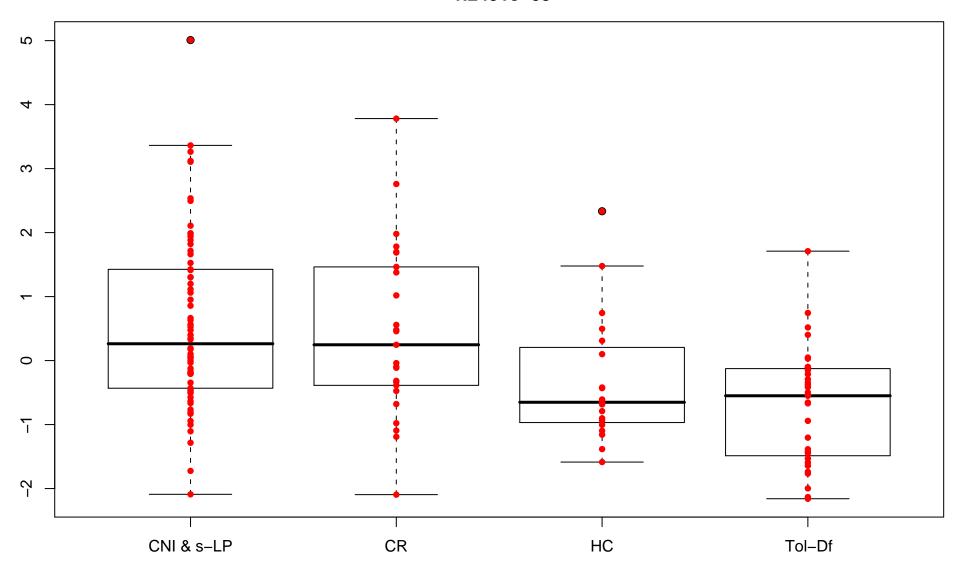
Rank 222 : PTHR1 1.2226e-05



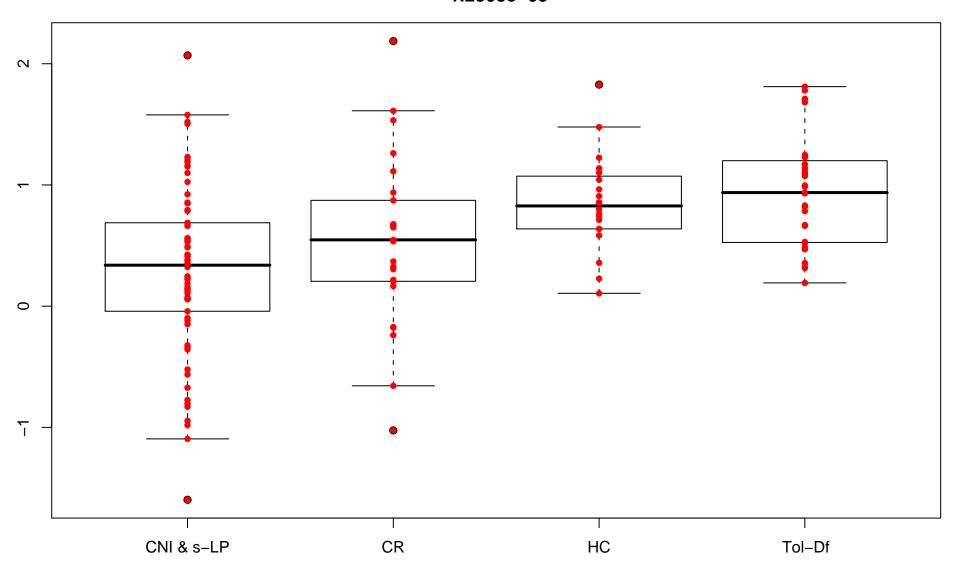
Rank 223 : ZNF14 1.2432e-05



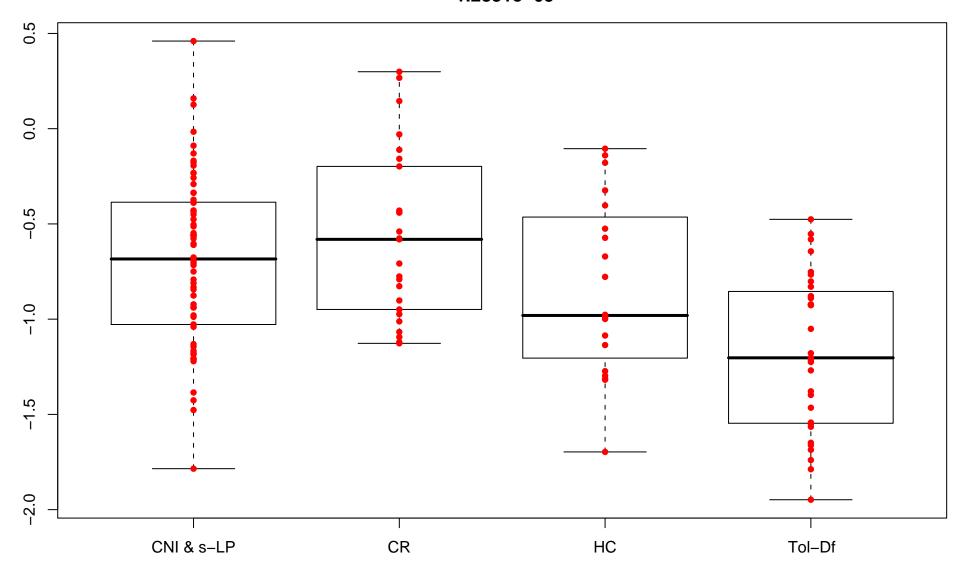
Rank 224 : ERG 1.2491e-05



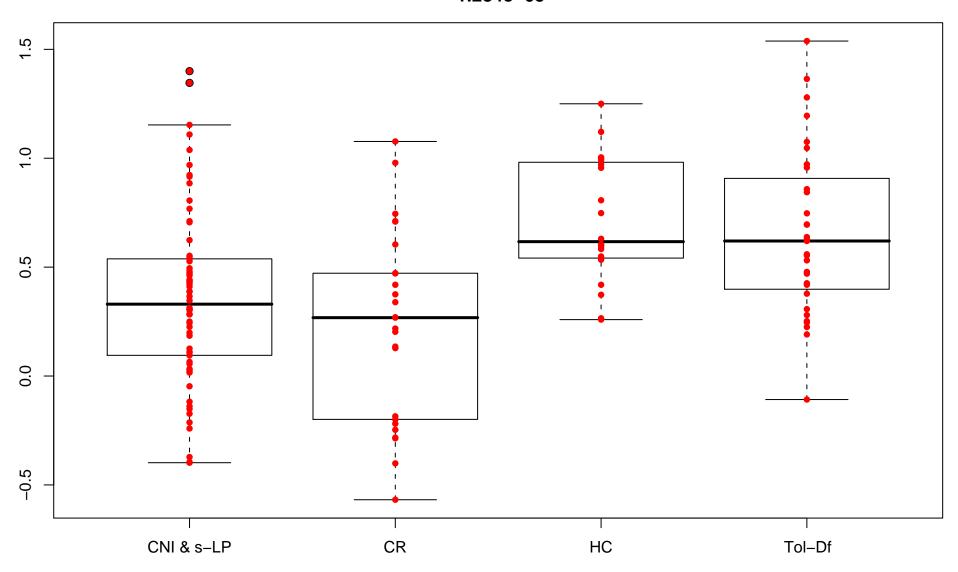
Rank 225 : IRF4 1.2508e-05



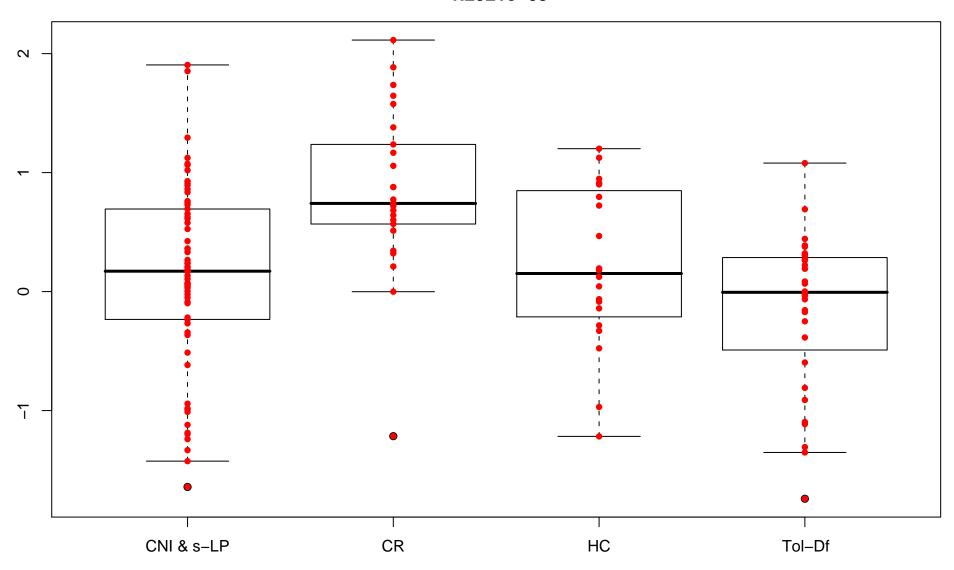
Rank 226 : TANK 1.2831e-05



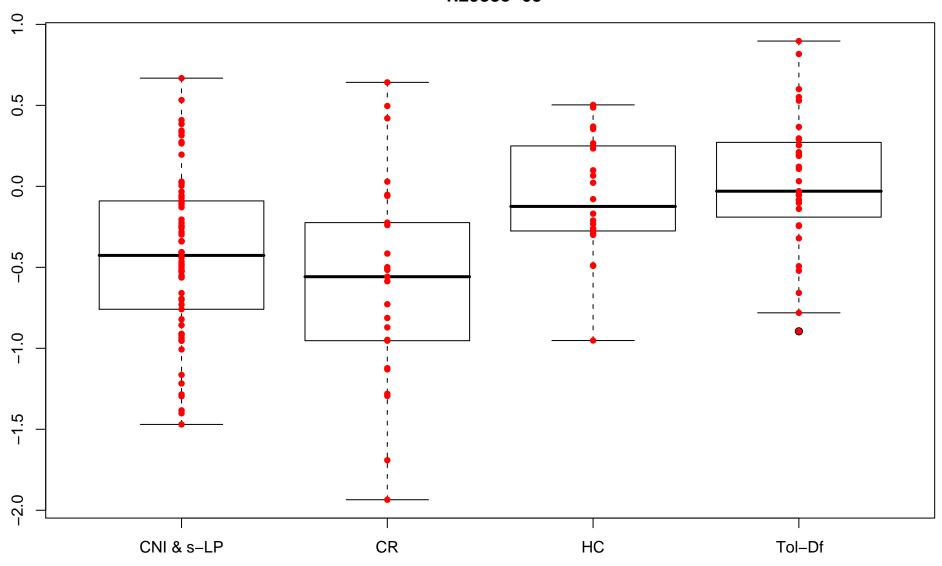
Rank 227 : TRIM4 1.284e-05



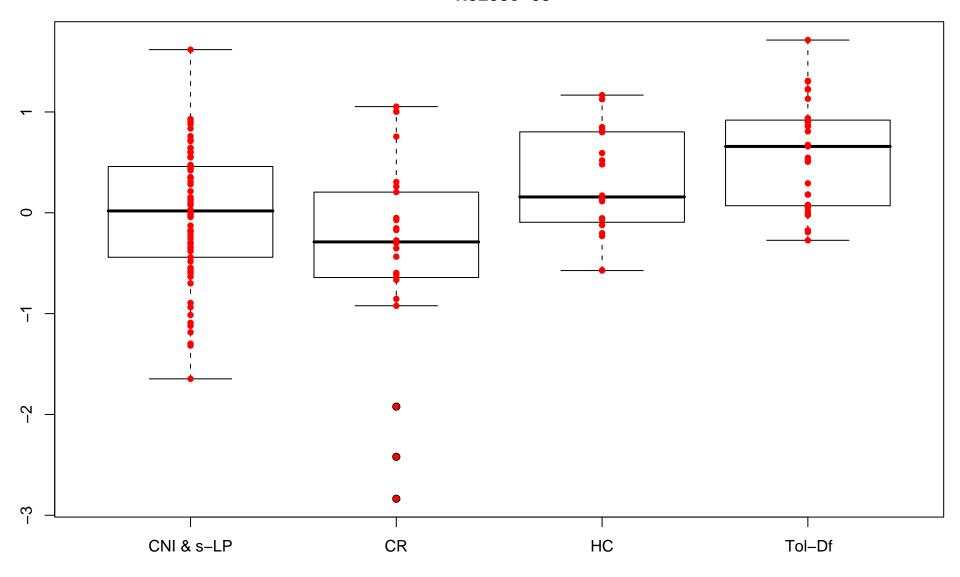
Rank 228 : AMFR 1.2921e-05



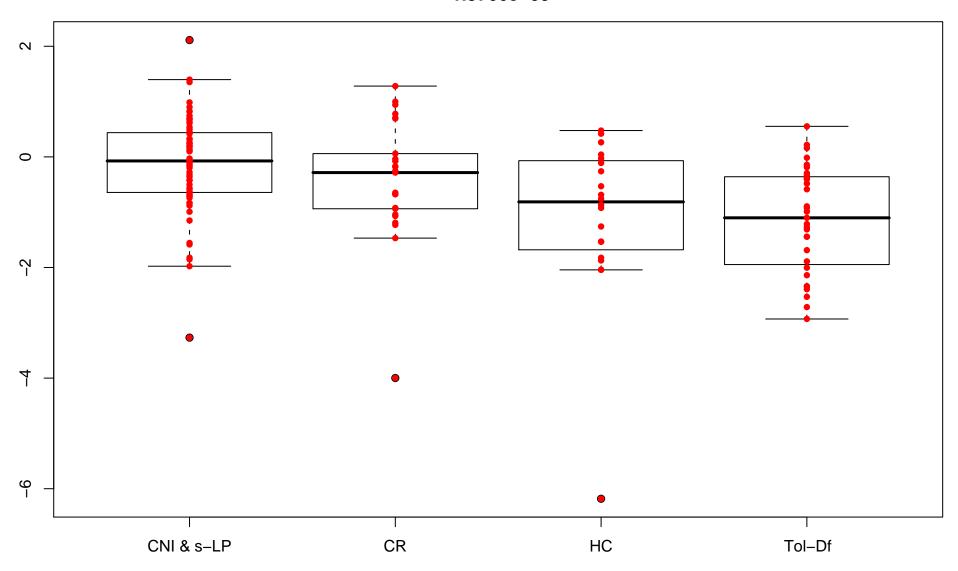
Rank 229 : HLTF 1.2938e-05



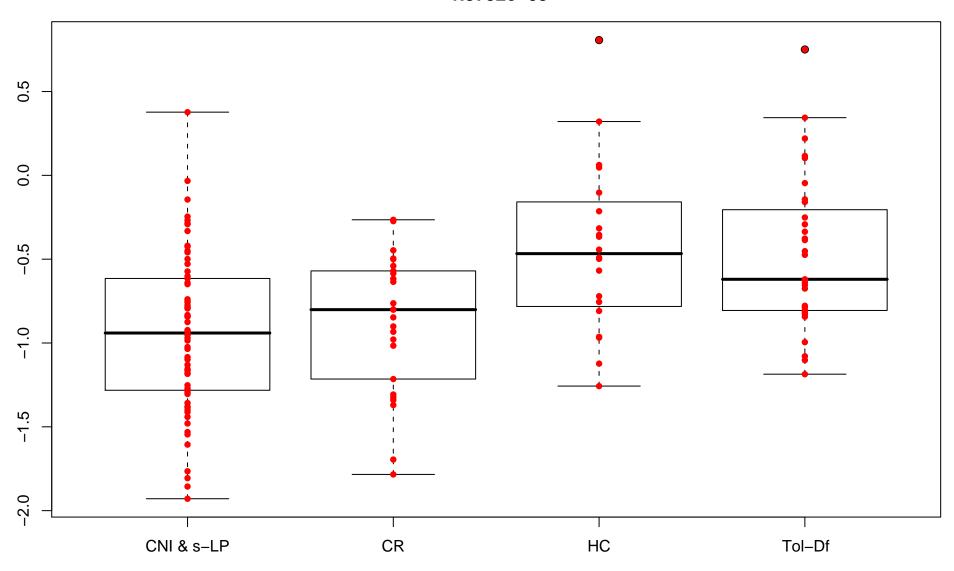
Rank 230 : CD6 1.3208e-05



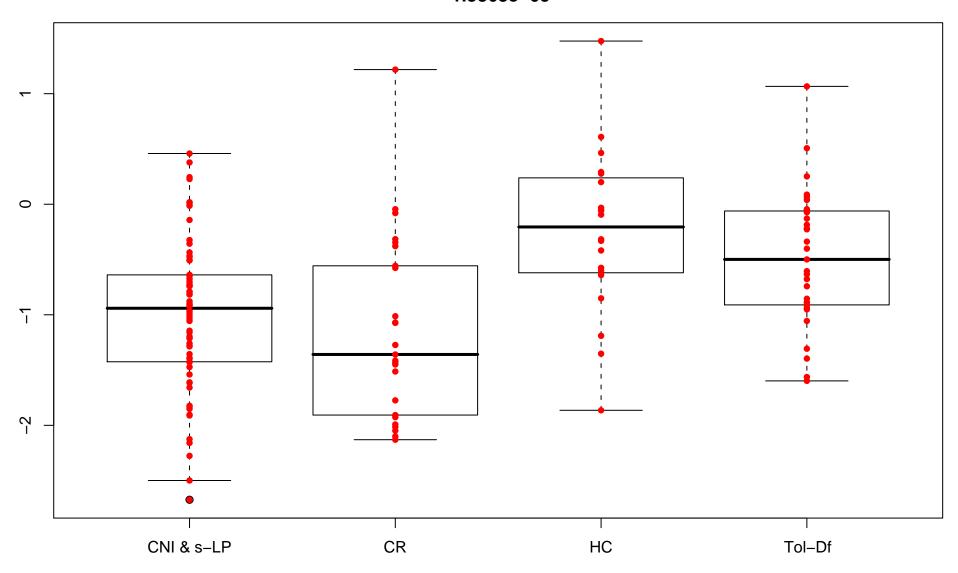
Rank 231 : ANXA3 1.3766e-05



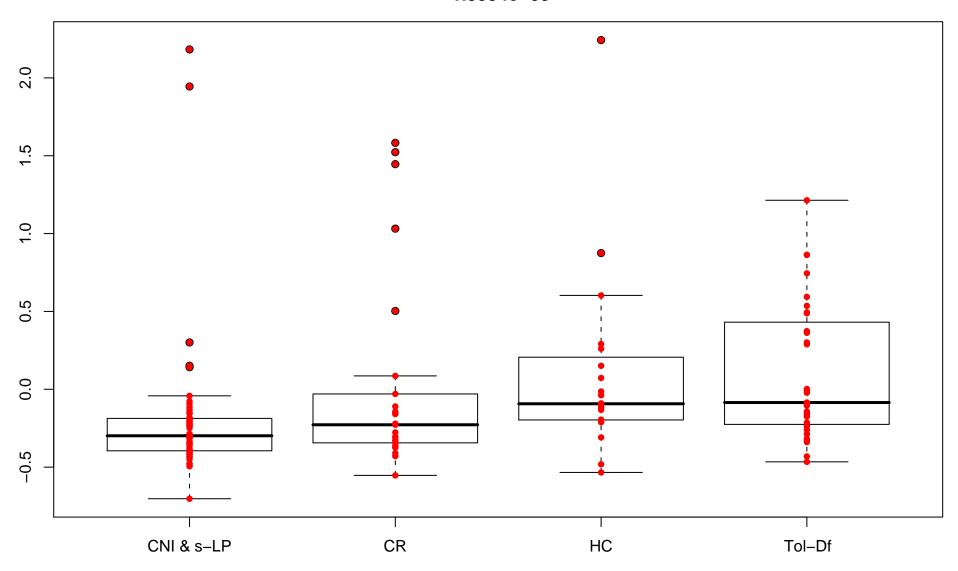
Rank 232 : C6ORF108 1.3792e-05



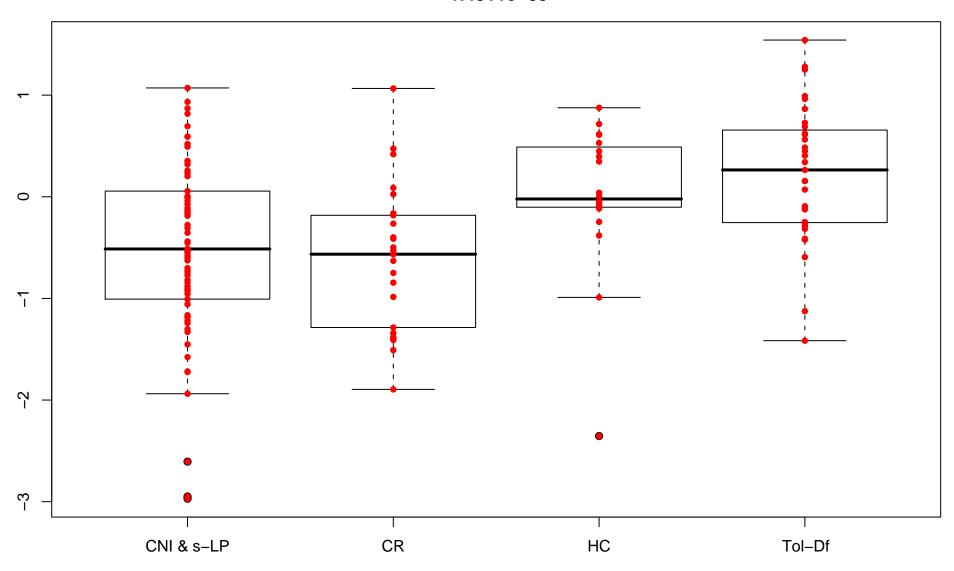
Rank 233 : CLC 1.3868e-05



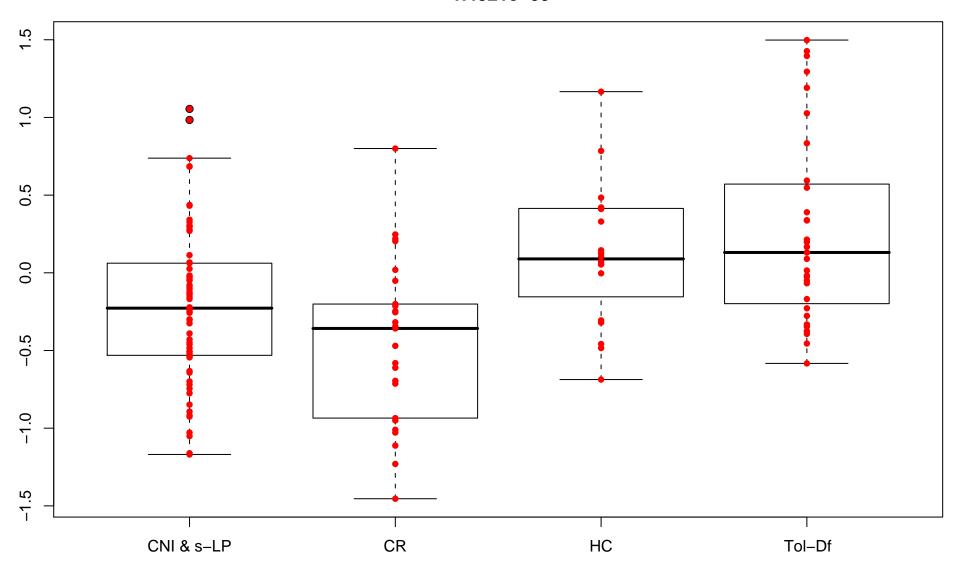
Rank 234 : AUTS2 1.3994e-05



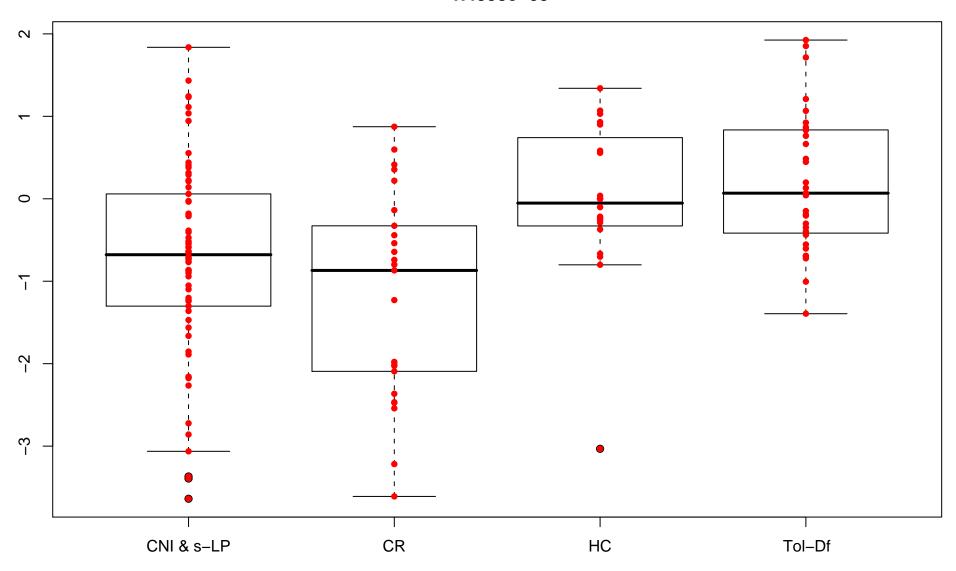
Rank 235 : ZNF549 1.4311e-05



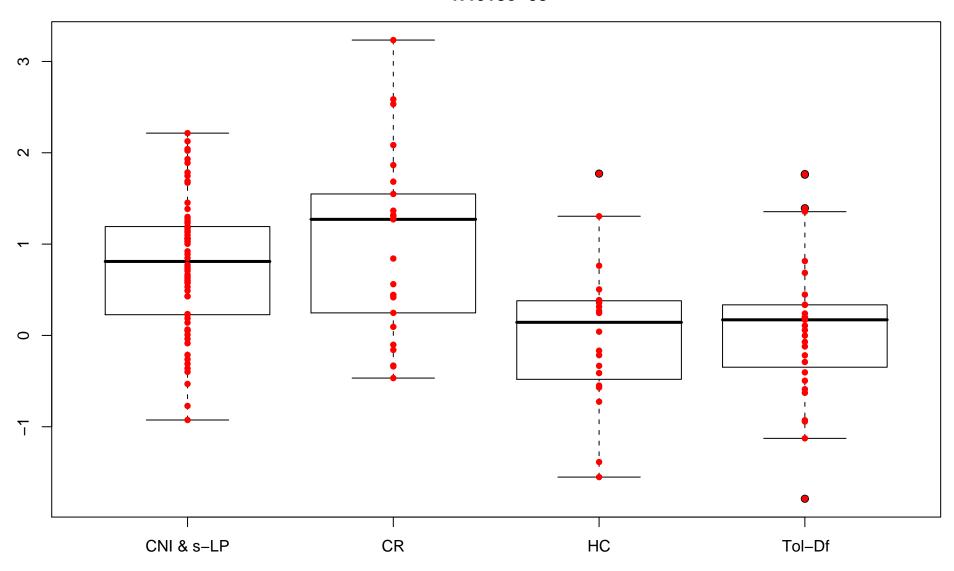
Rank 236 : TKTL1 1.4321e-05



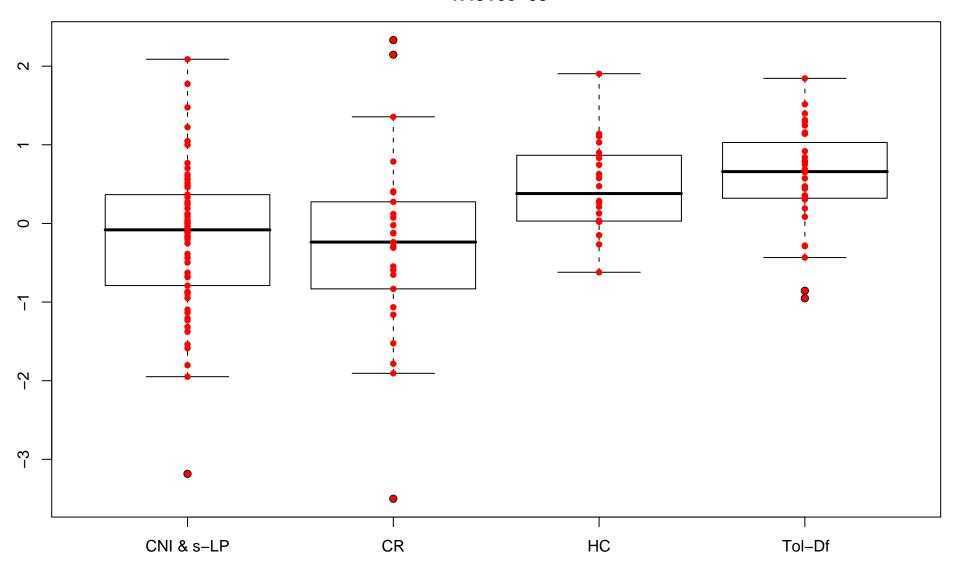
Rank 237 : NR3C2 1.4358e-05



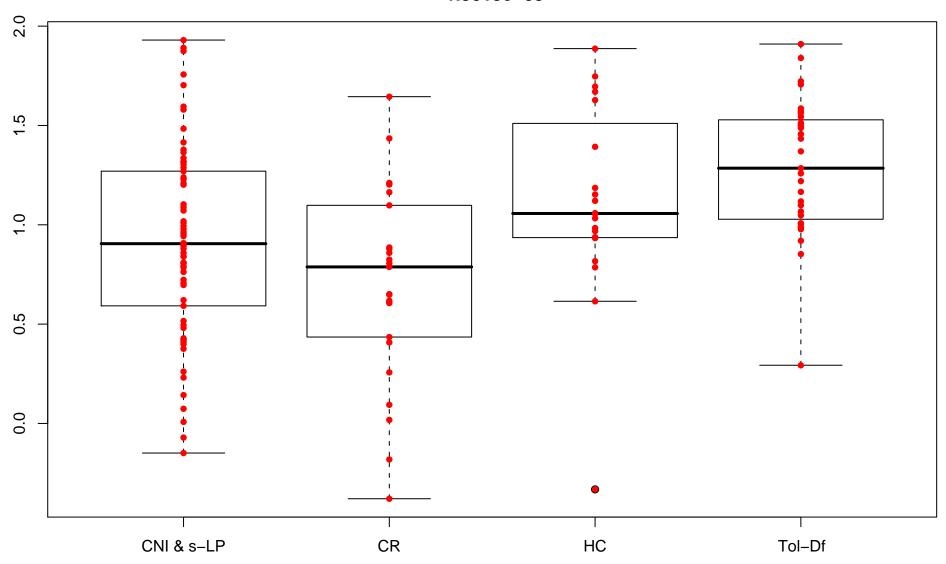
Rank 238 : MAOB 1.4618e-05



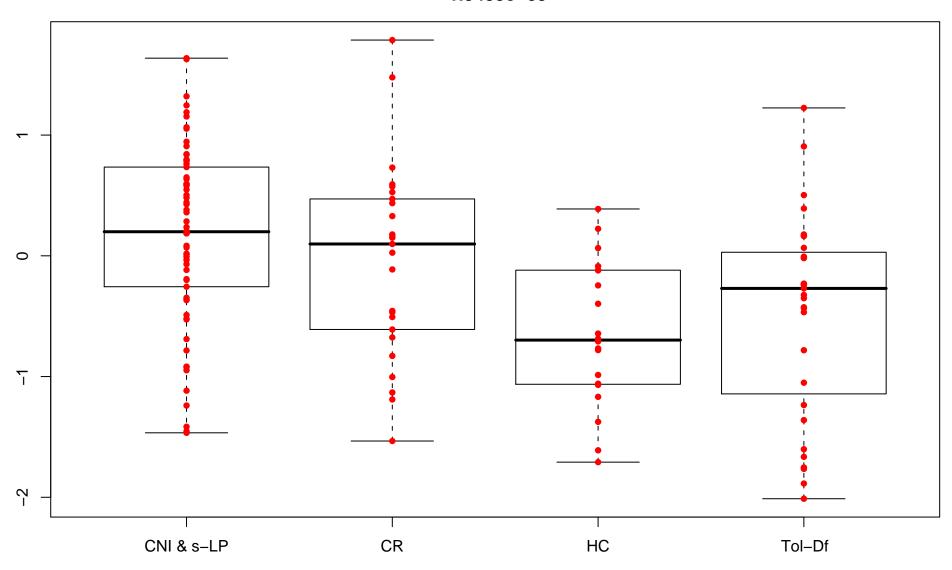
Rank 239 : IL28RA 1.4916e-05



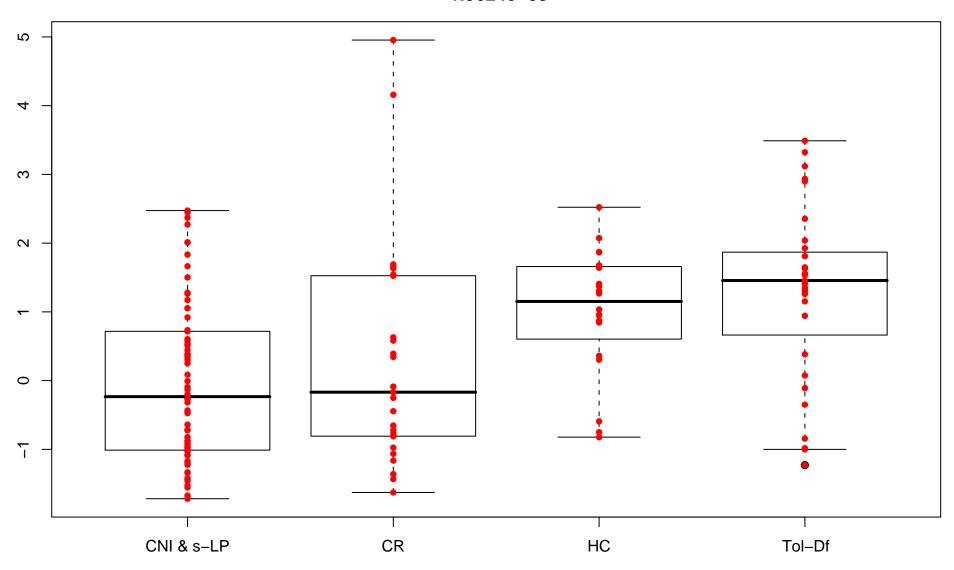
Rank 240 : DNMT1 1.5013e-05



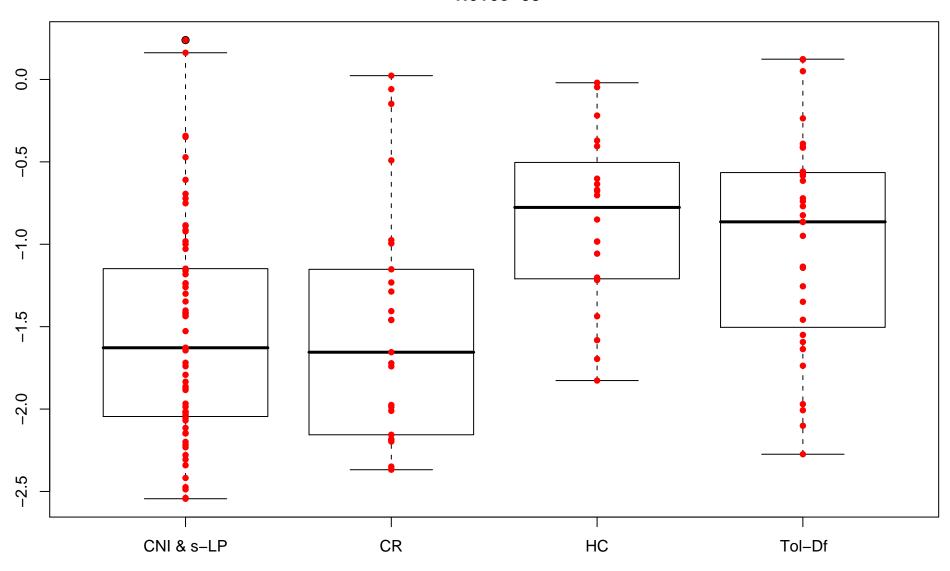
Rank 241 : FCAR 1.5455e-05



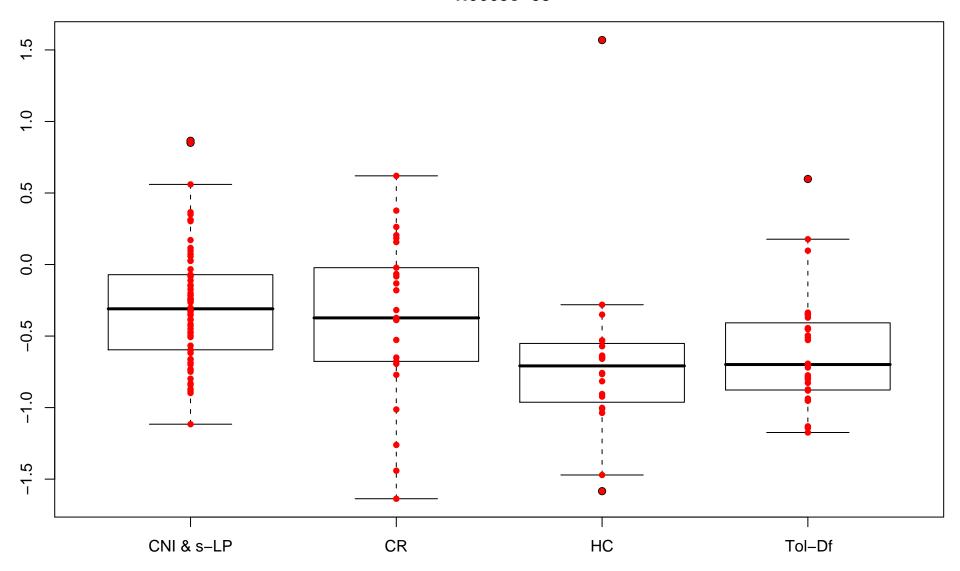
Rank 242 : PLEKHG1 1.5624e-05



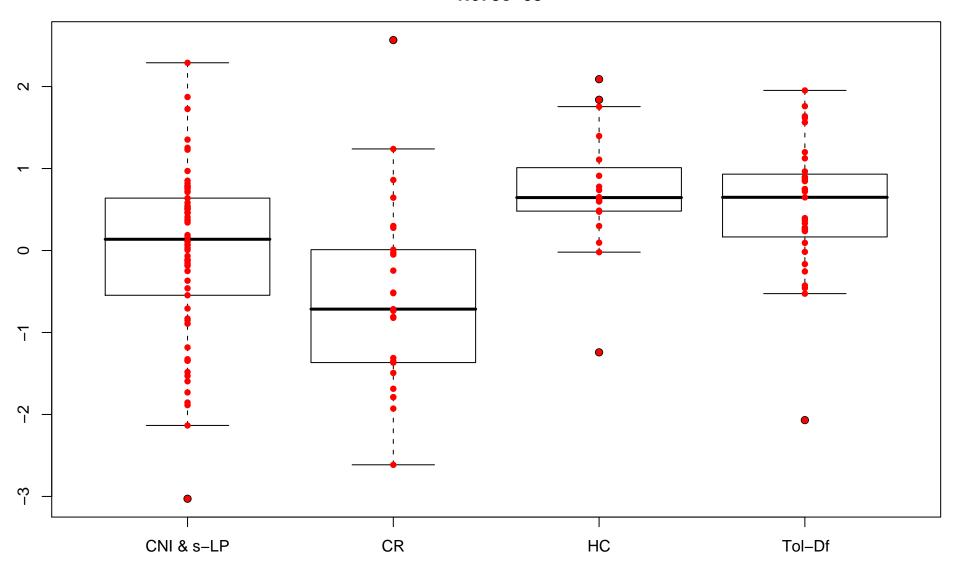
Rank 243 : A\_24\_P910255 1.616e-05



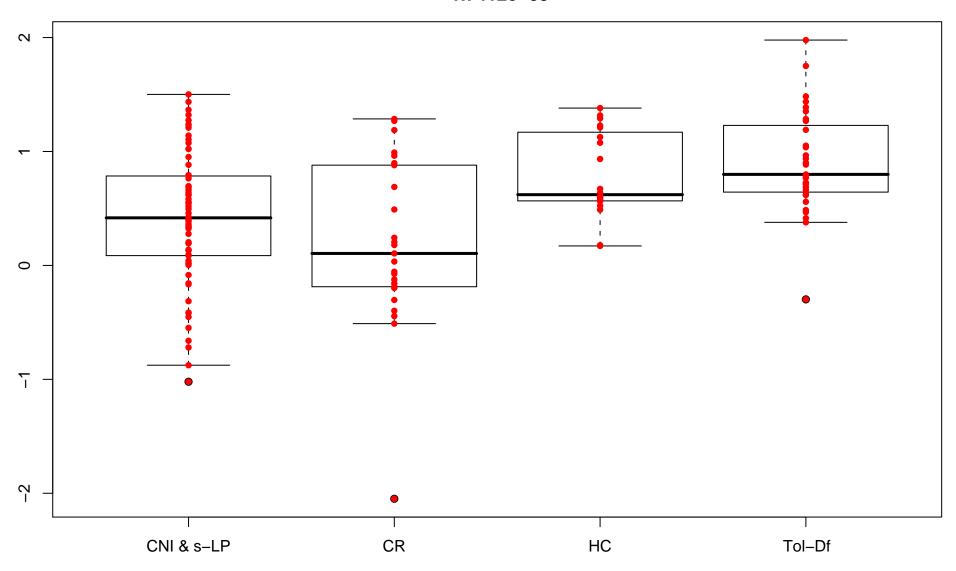
Rank 244 : ZAK 1.6665e-05



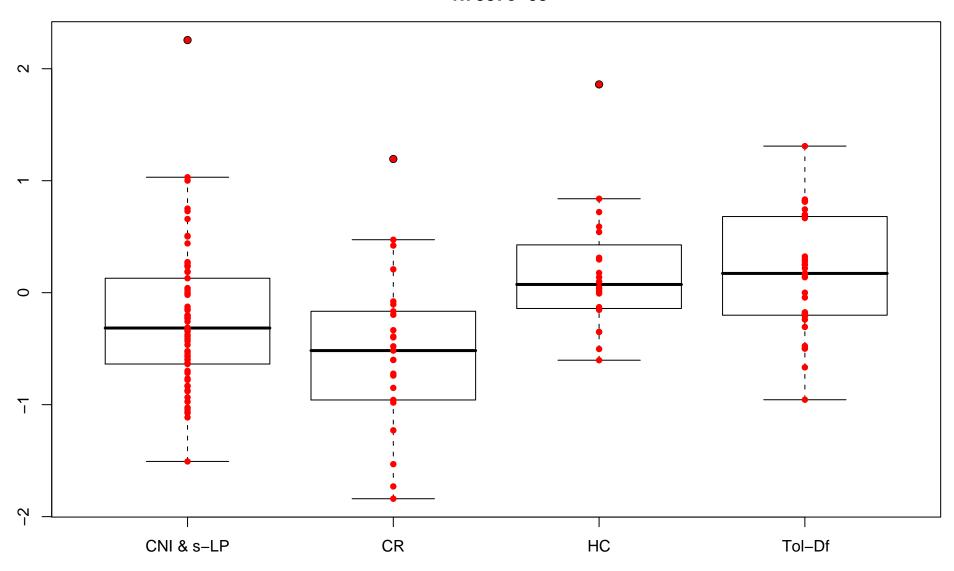
Rank 245 : IL4 1.673e-05



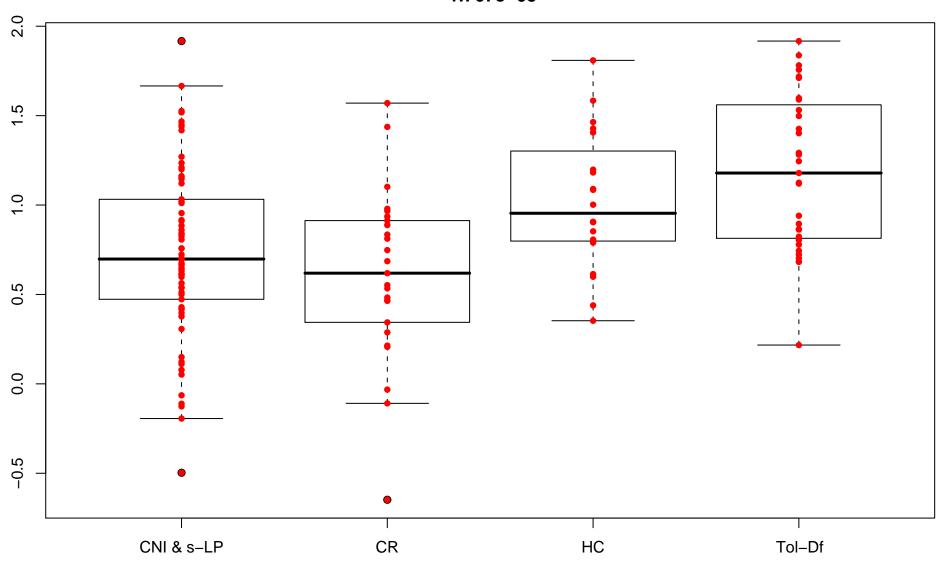
Rank 246: RTTN 1.7412e-05



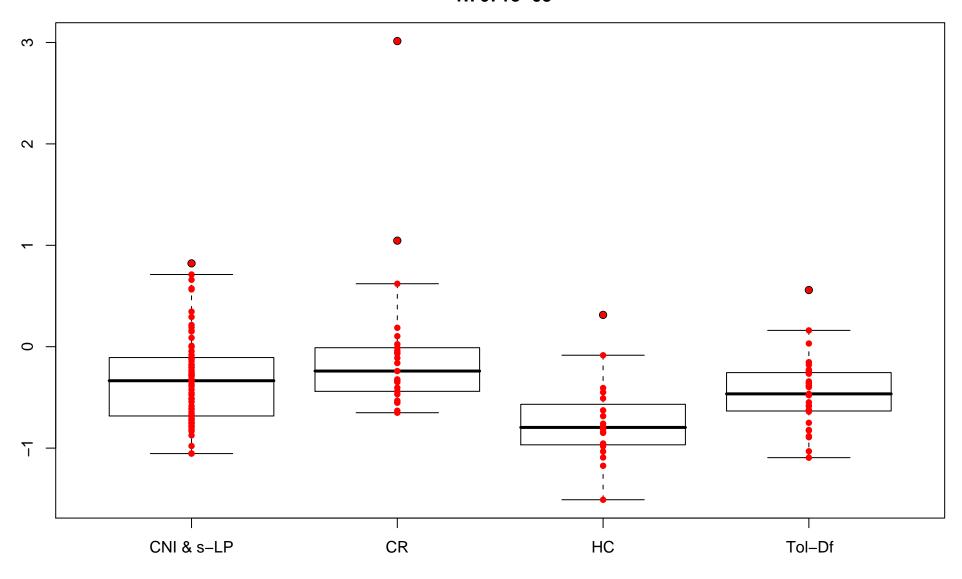
Rank 247 : STMN1 1.7537e-05



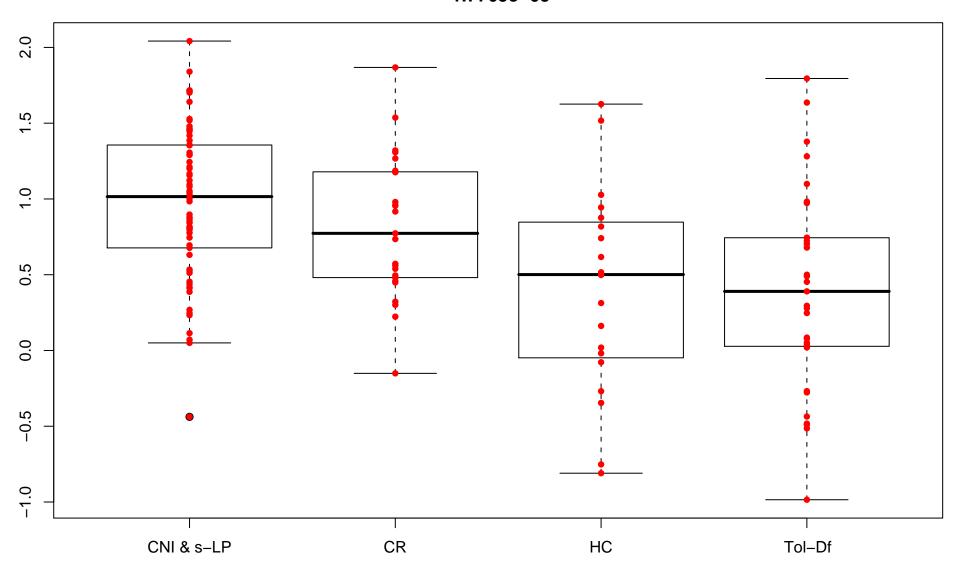
Rank 248 : SEPT9 1.767e-05



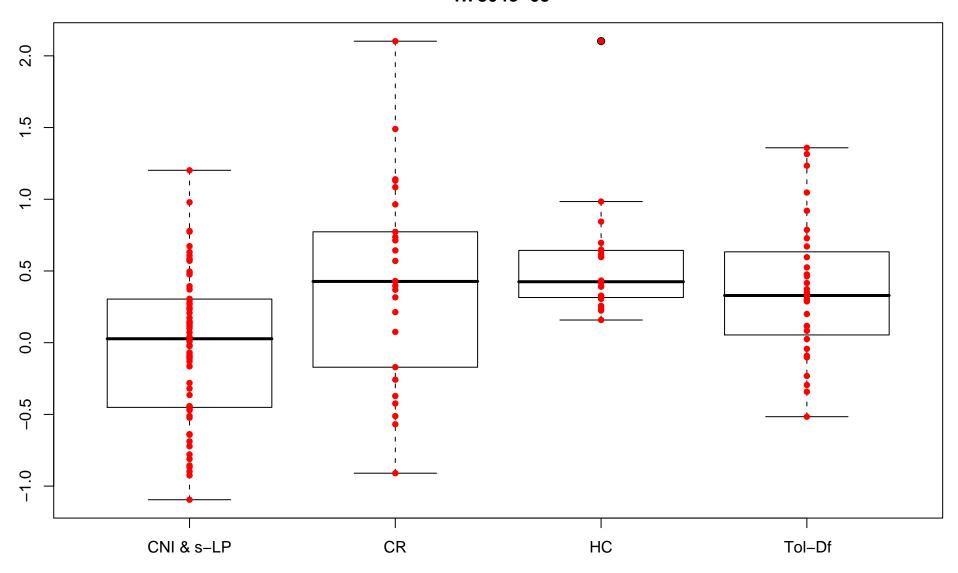
Rank 249 : A\_23\_P393495 1.7671e-05



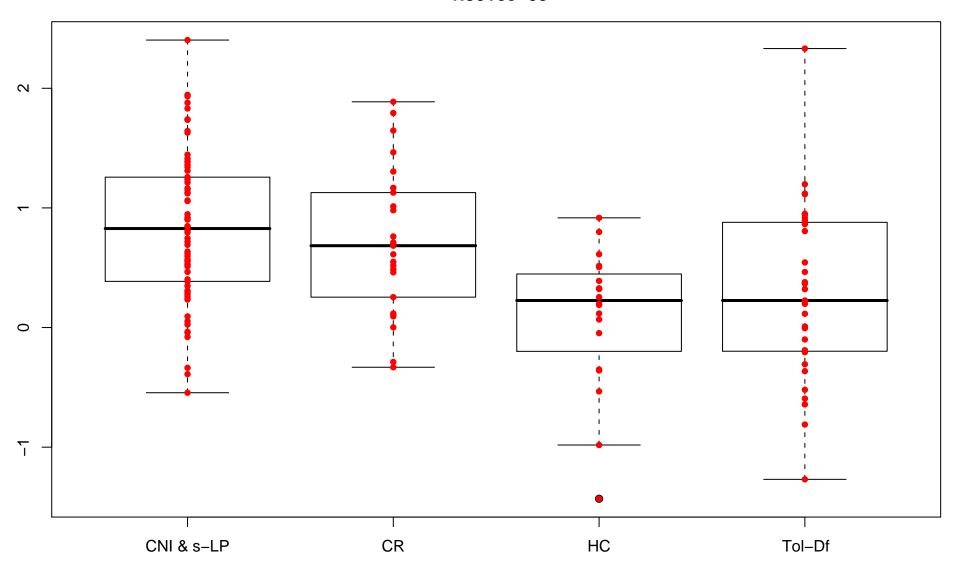
Rank 250 : DYSF 1.7765e-05



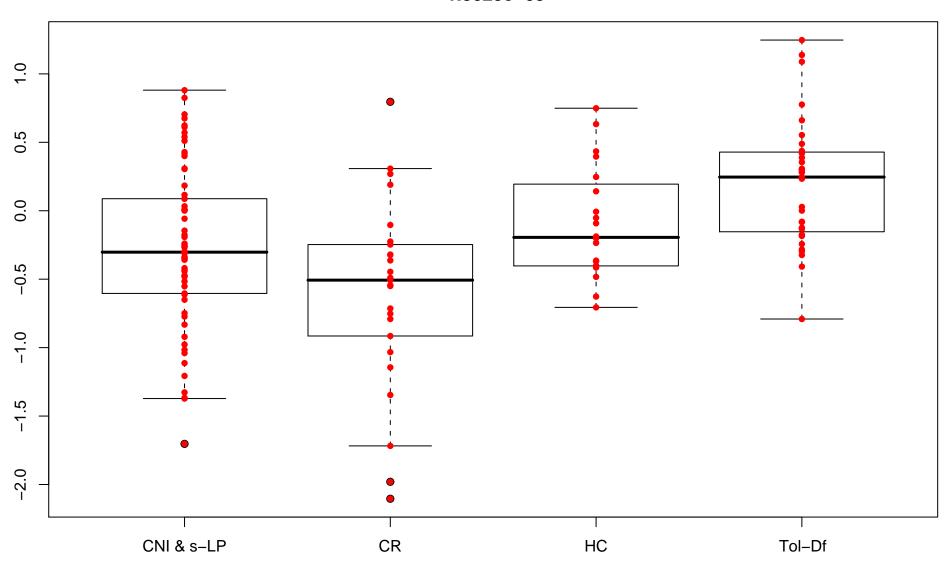
Rank 251 : BCL11A 1.7804e-05



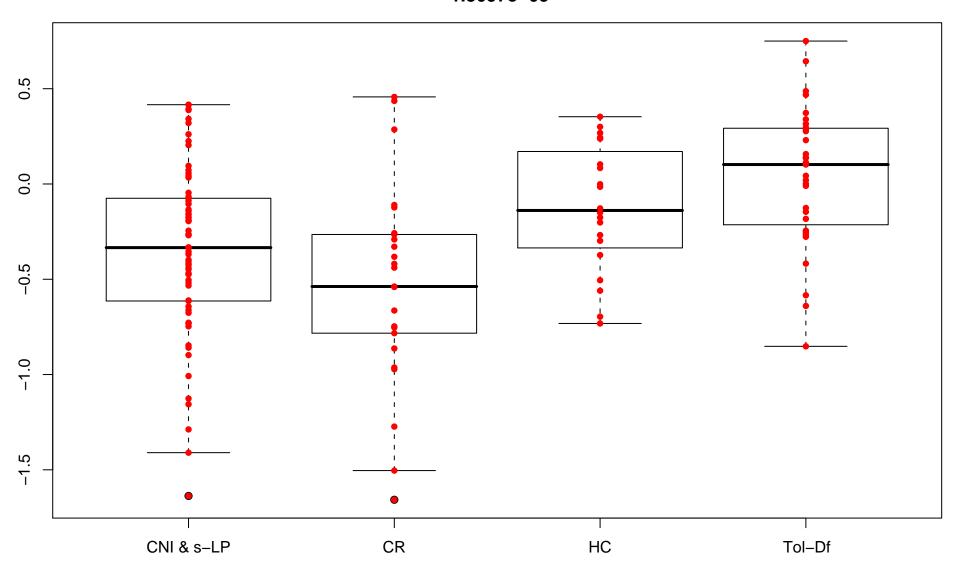
252 : FLJ14186;LOC441124;LOC646434;LOC653056;LOC728417;LOC728728;LOC729021;LOC729028;LOC730953;L 1.8016e-05



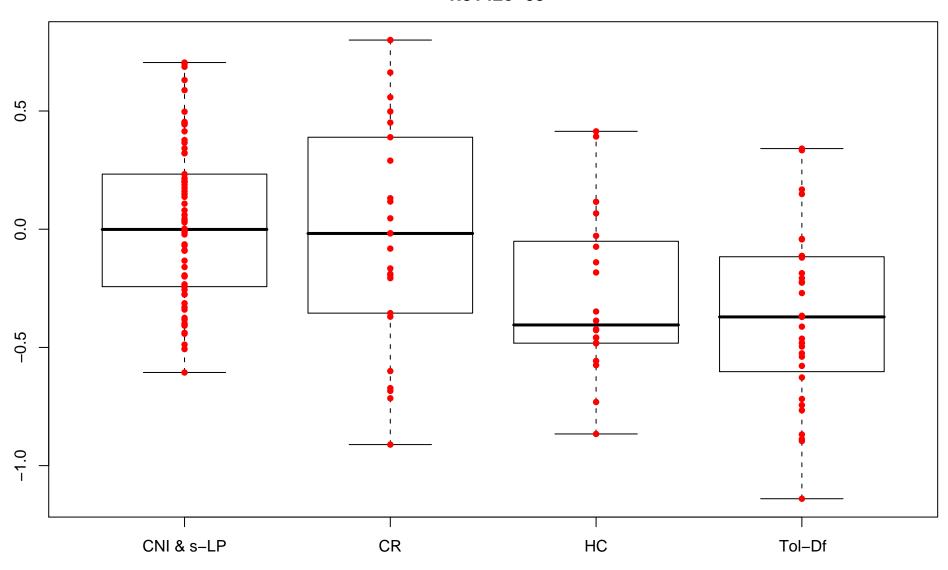
Rank 253 : RASGRP1 1.8023e-05



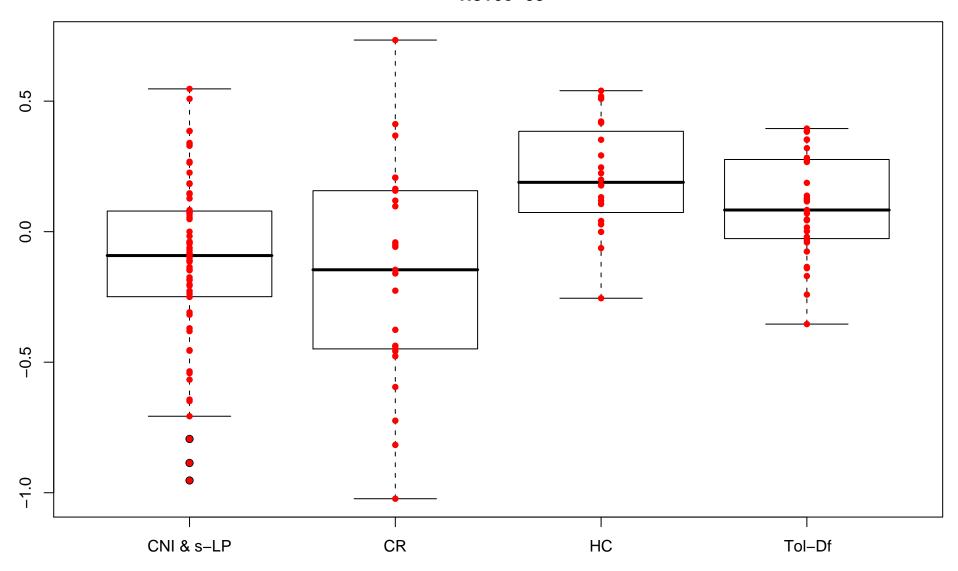
Rank 254 : PPP3CC 1.8097e-05



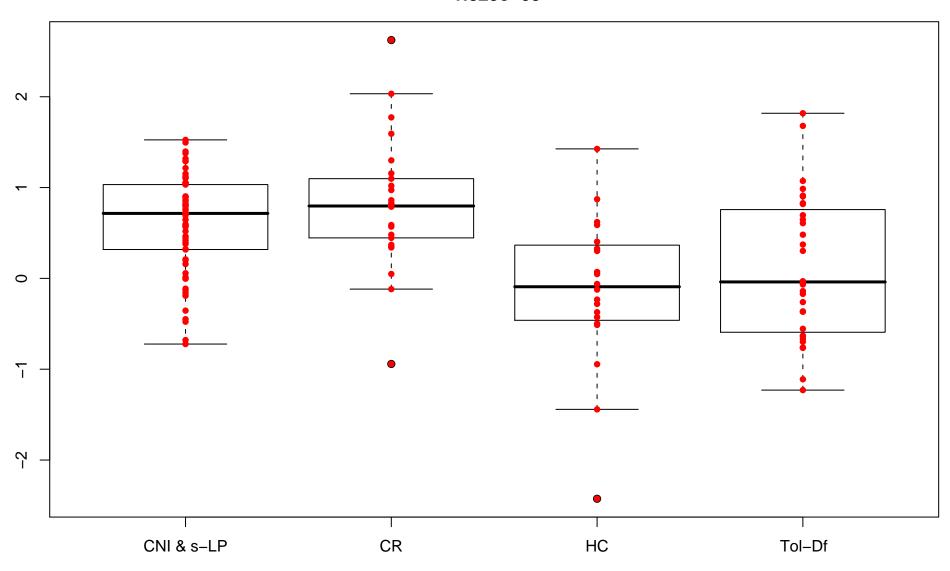
Rank 255 : EIF2C4 1.8142e-05



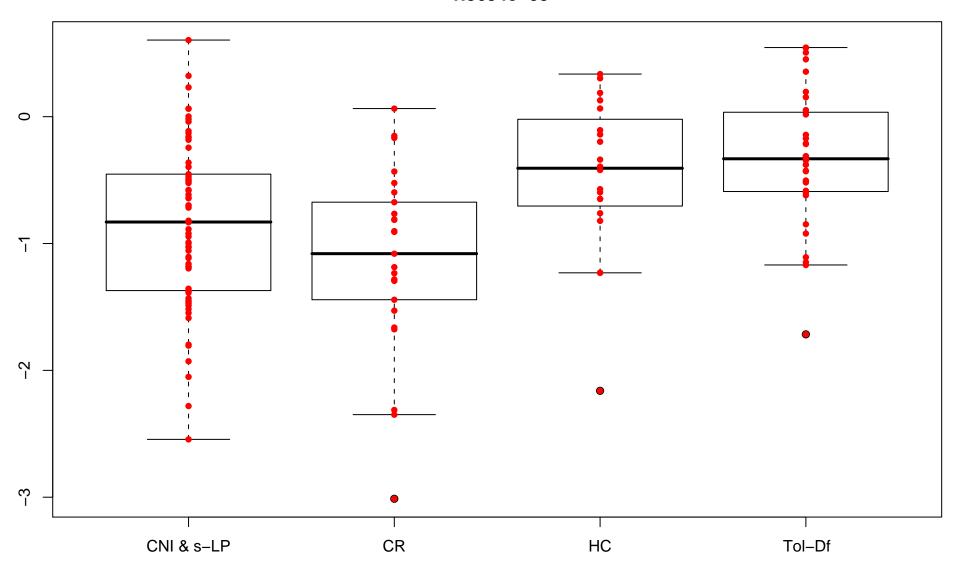
Rank 256: MTX3 1.816e-05



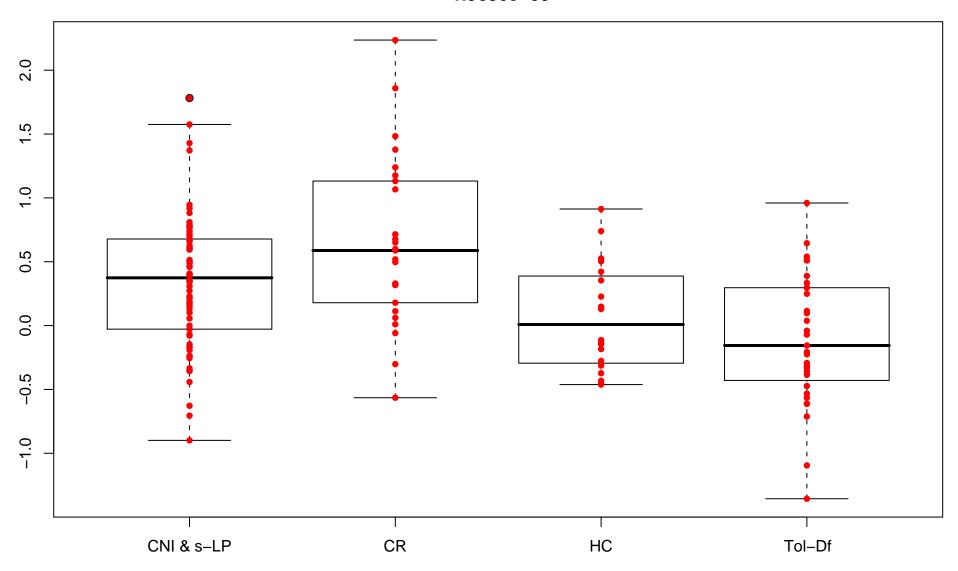
Rank 257 : DDEF1IT1 1.825e-05



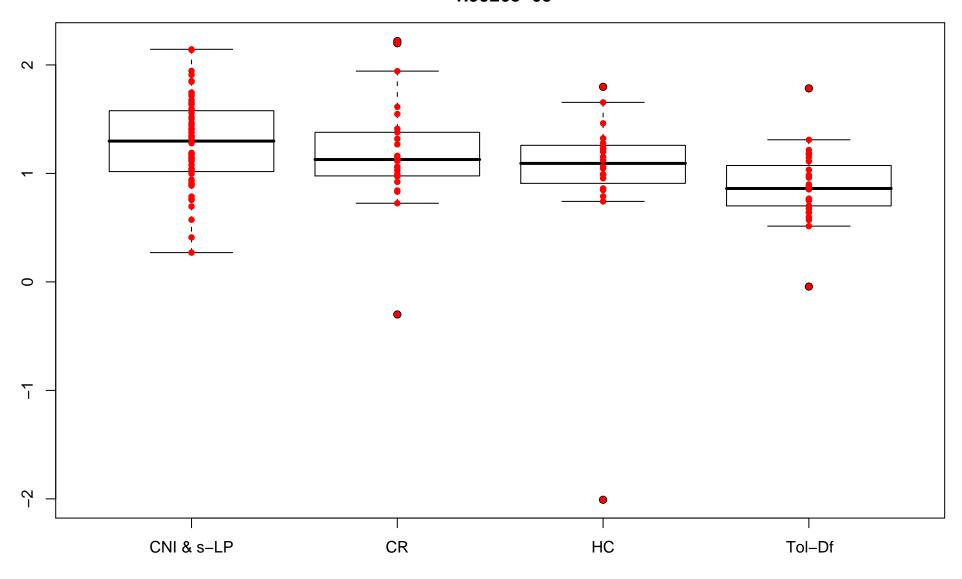
Rank 258 : LOC100129122 1.8654e-05



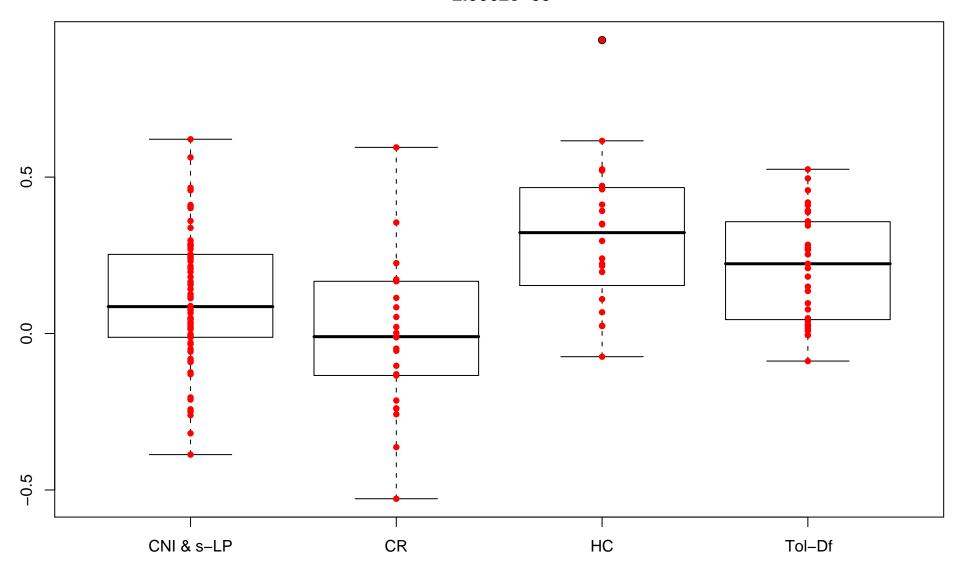
Rank 259 : PDE2A 1.9686e-05



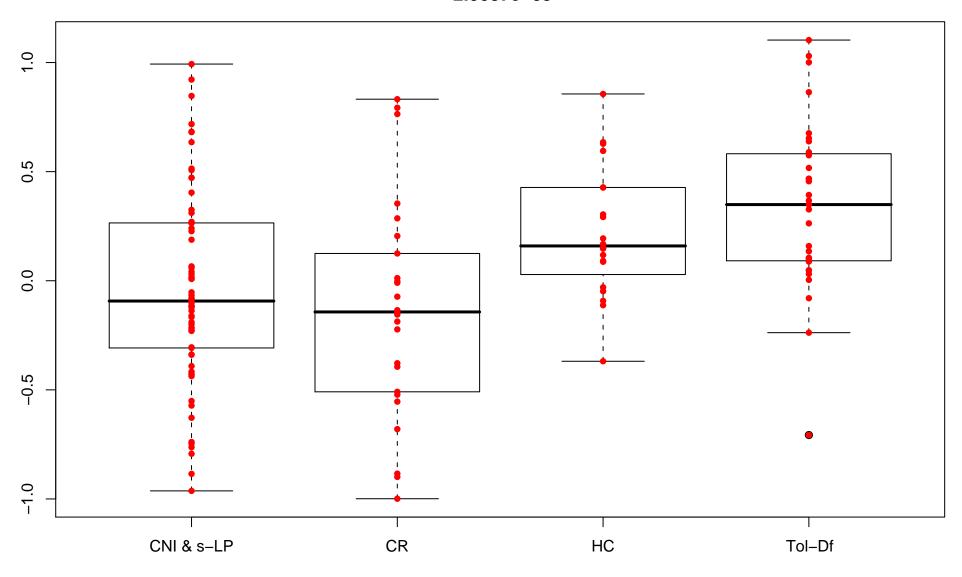
Rank 260 : ITGAM 1.9926e-05



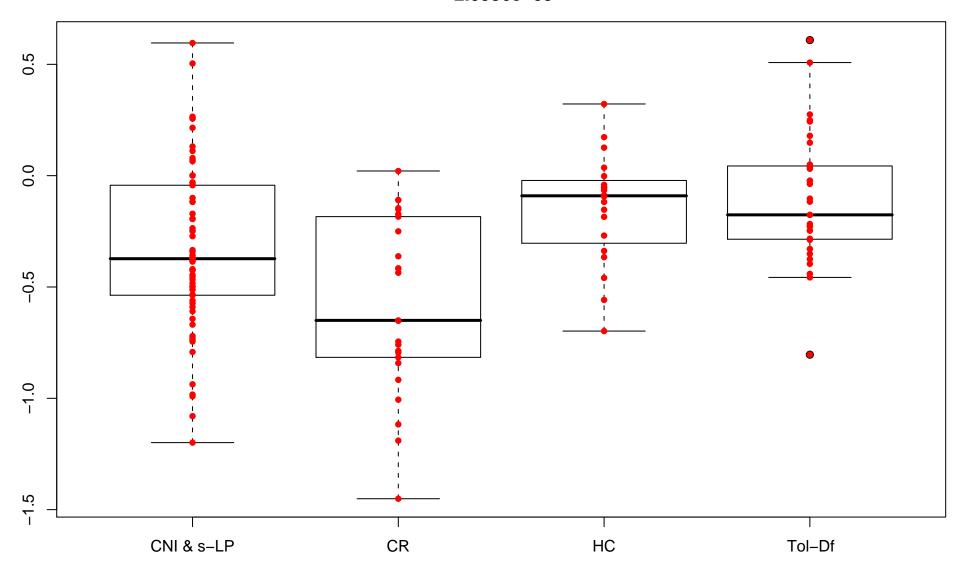
Rank 261 : MIZF 2.0062e-05



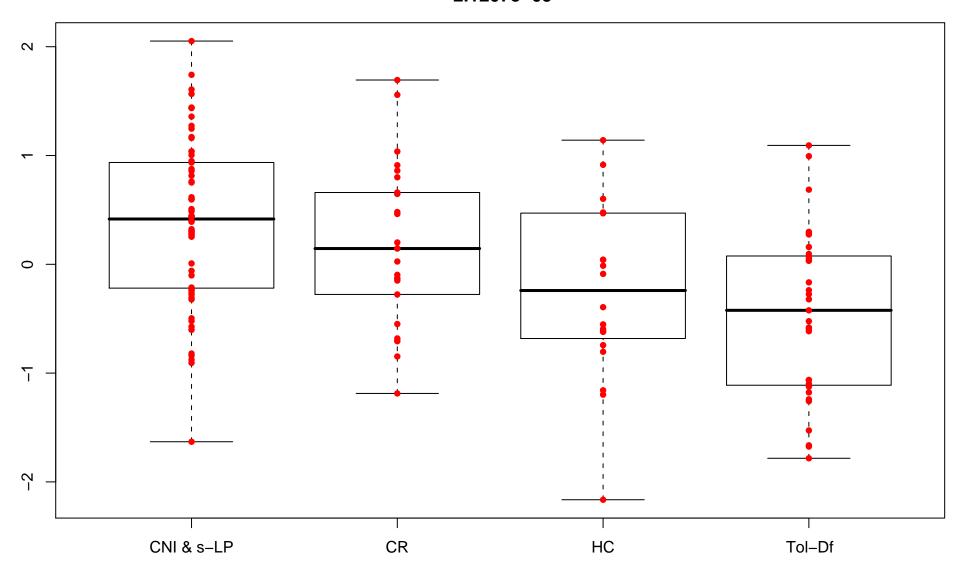
Rank 262 : SET 2.0087e-05



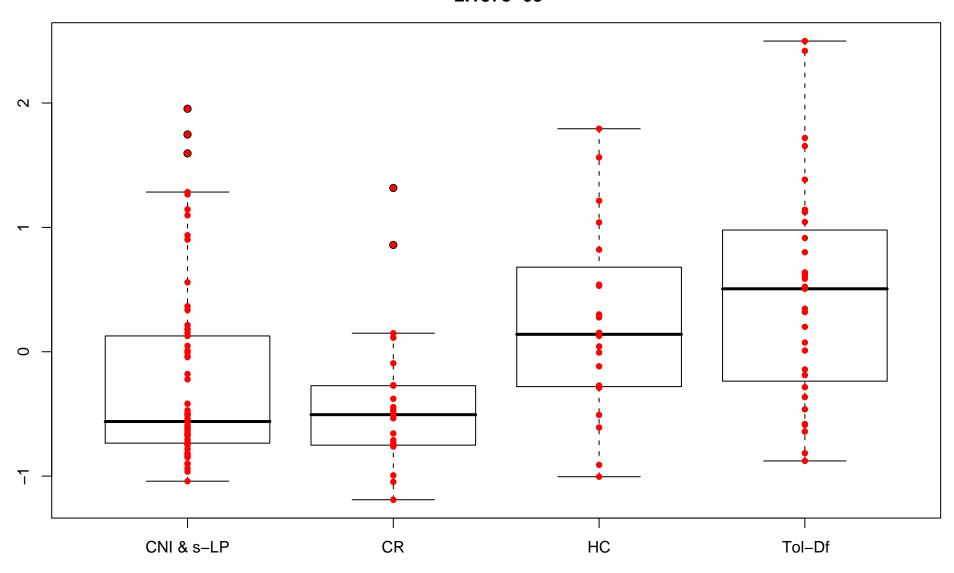
Rank 263 : RBBP9 2.0936e-05



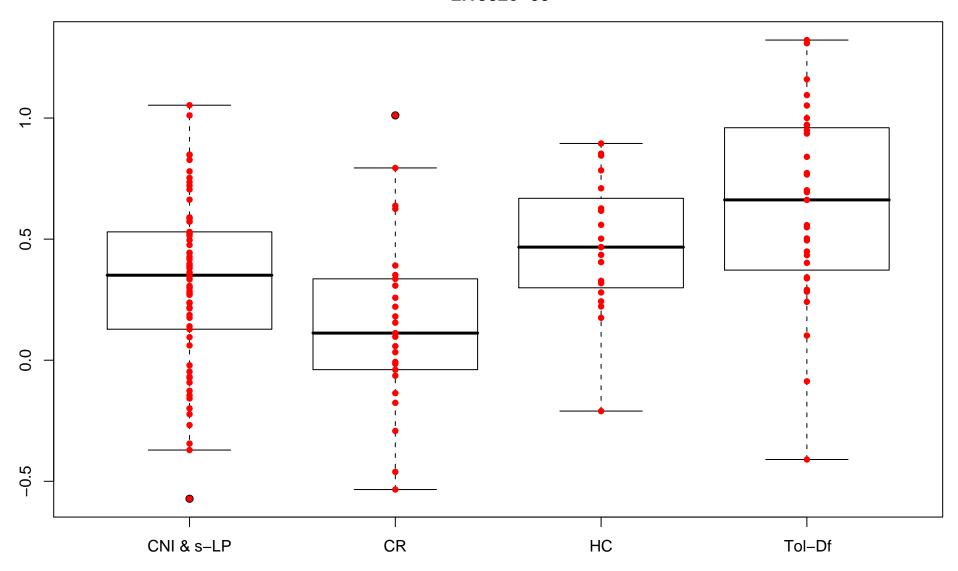
Rank 264 : SLC26A8 2.1207e-05



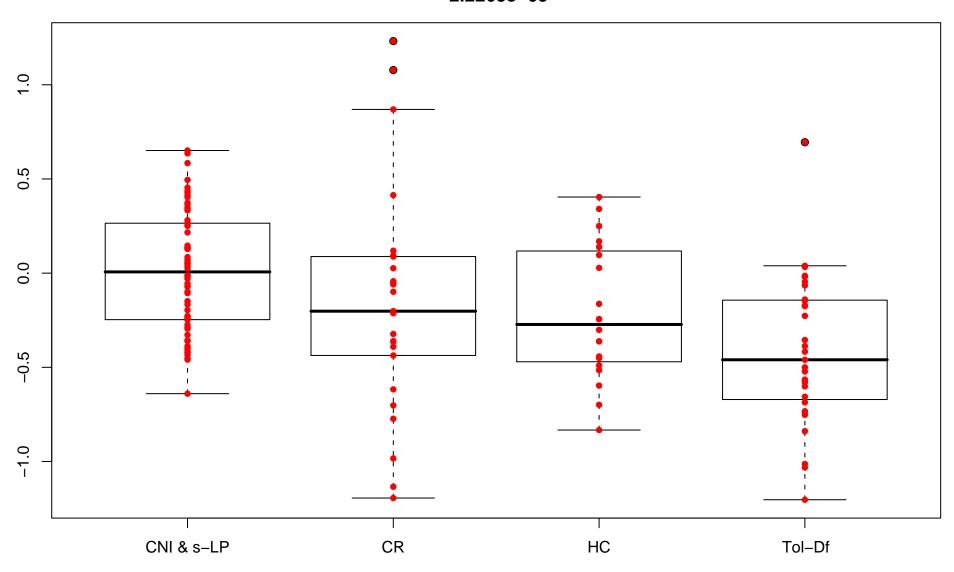
Rank 265 : A\_24\_P110487 2.137e-05



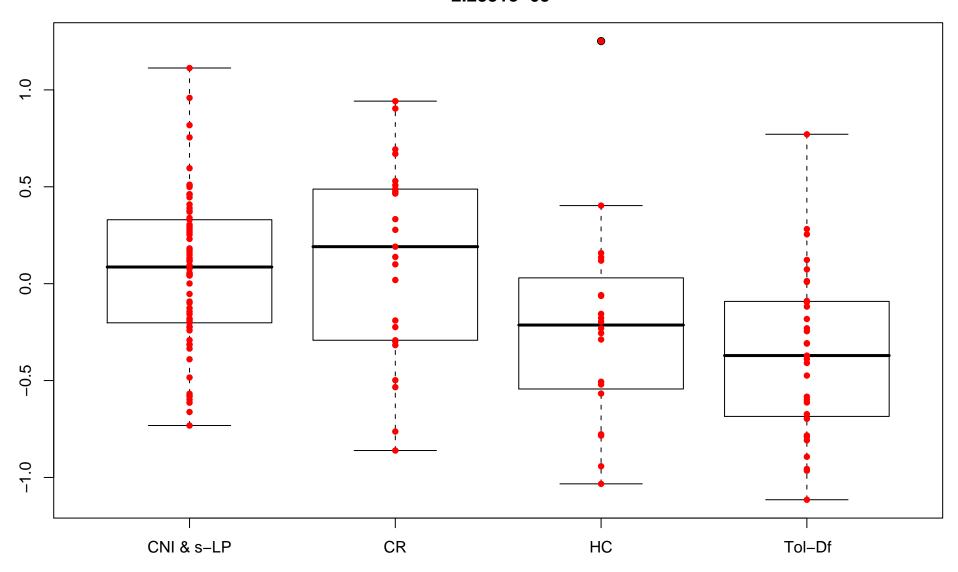
Rank 266 : IL10RA 2.1382e-05



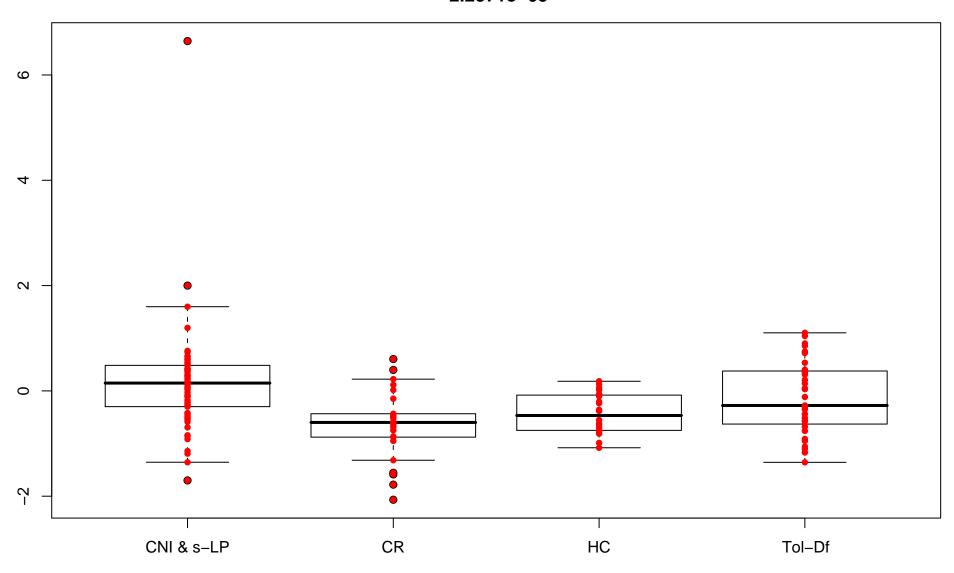
Rank 267 : FLJ22662 2.2268e-05



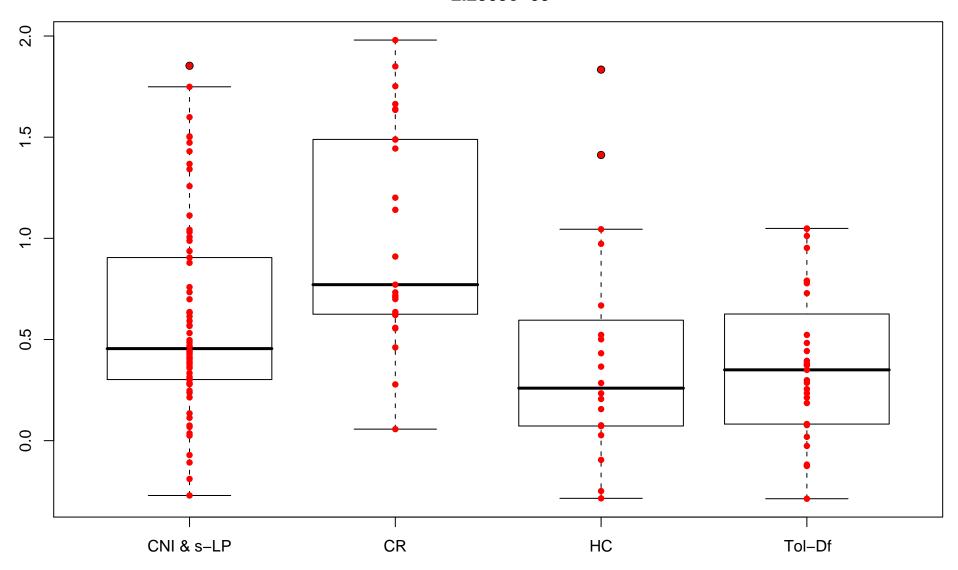
Rank 268 : SPI1 2.2331e-05



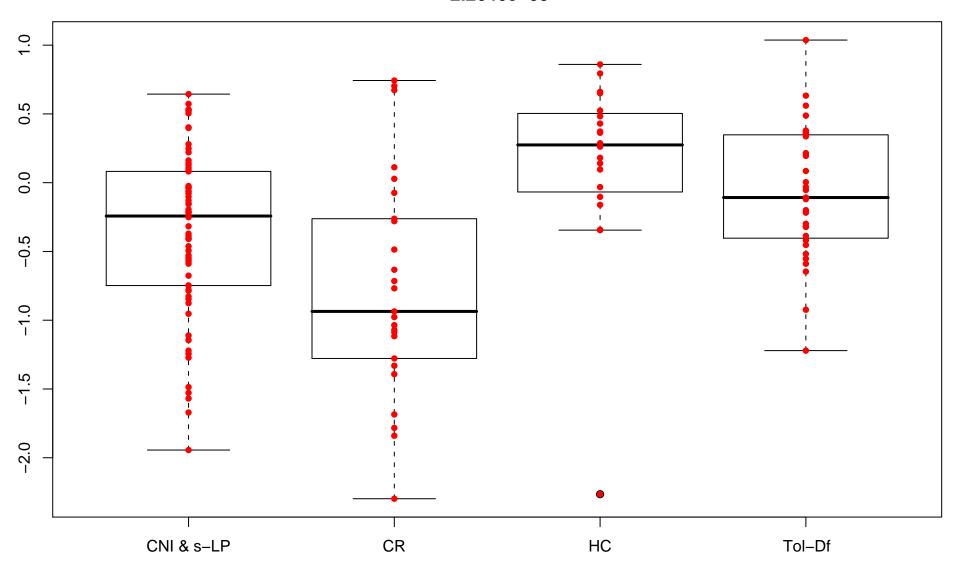
Rank 269 : THC2296737 2.2371e-05



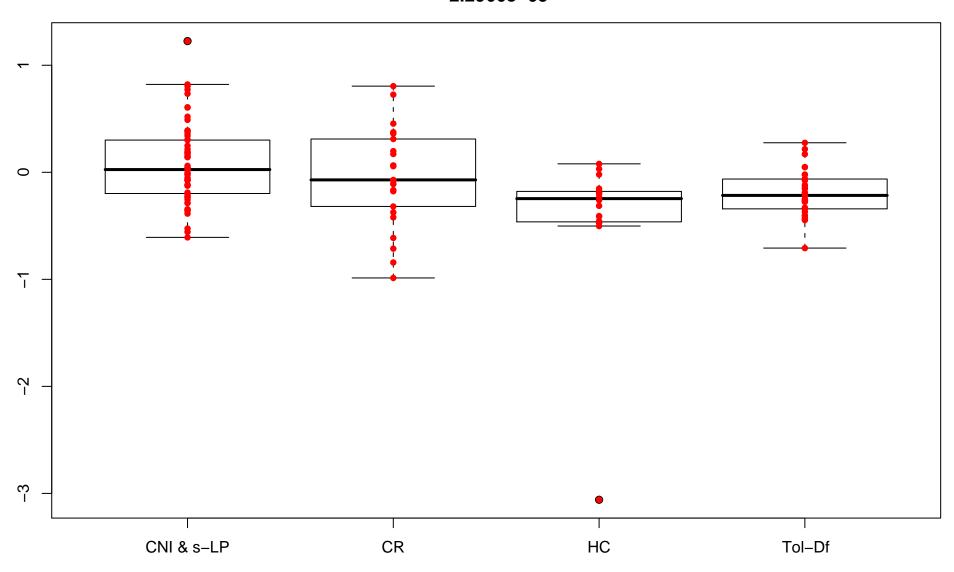
Rank 270 : LMNA 2.2509e-05



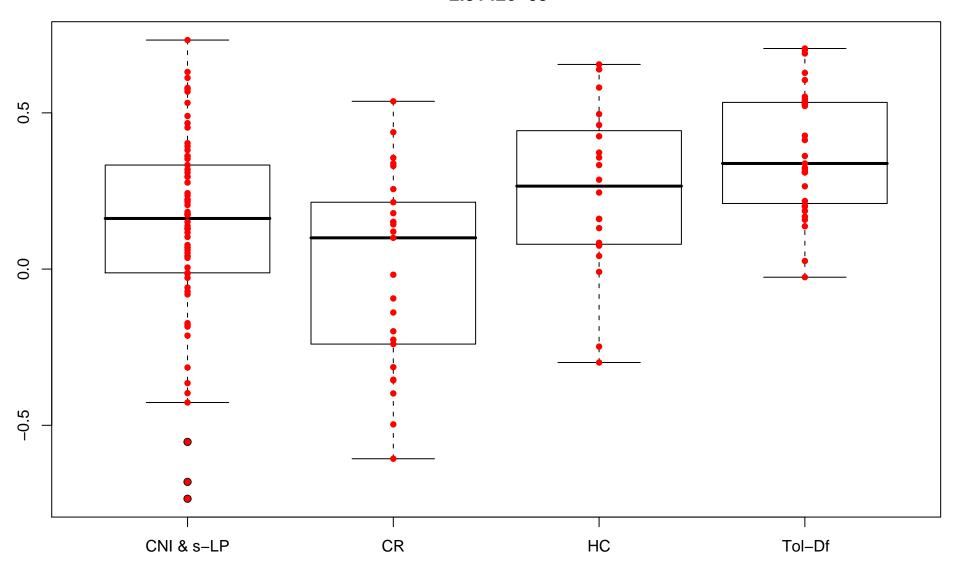
Rank 271 : FCER1A 2.2646e-05



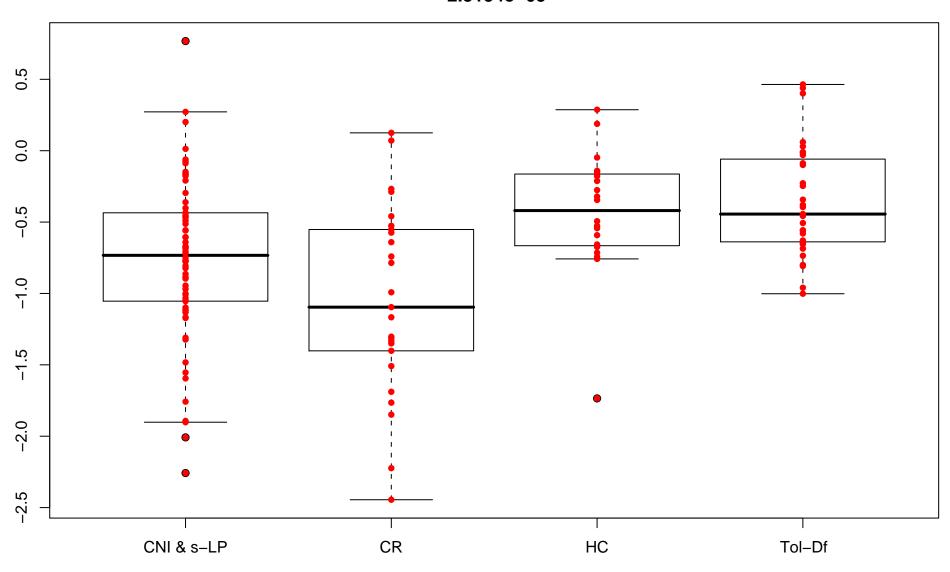
Rank 272 : GCLM 2.2966e-05



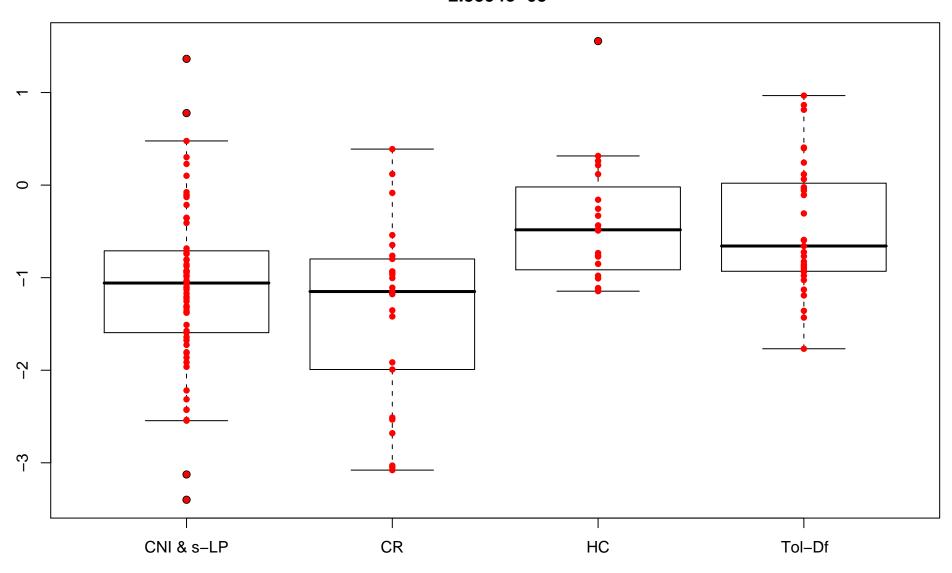
Rank 273 : INTS10 2.3142e-05



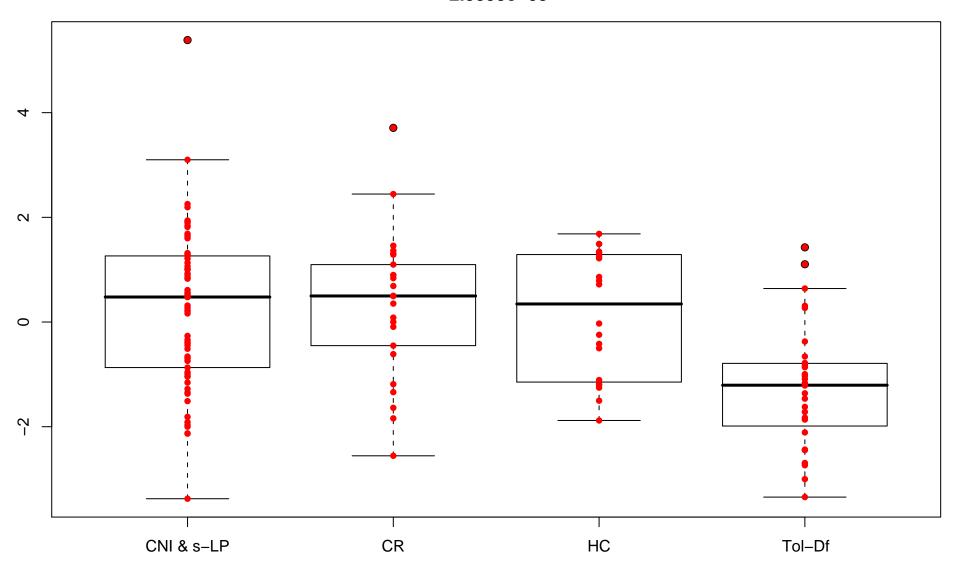
Rank 274 : GPX7 2.3154e-05



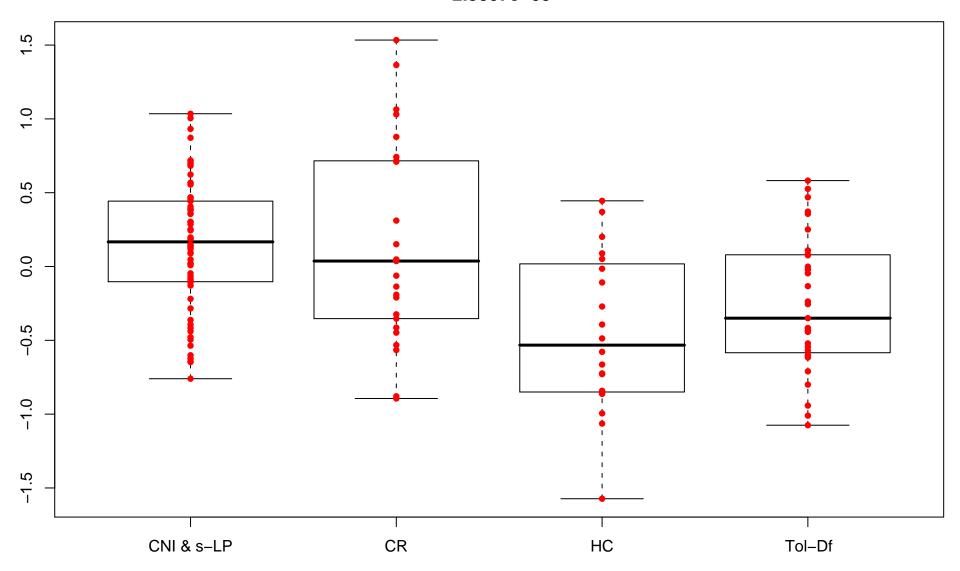
Rank 275 : CD40LG 2.3594e-05



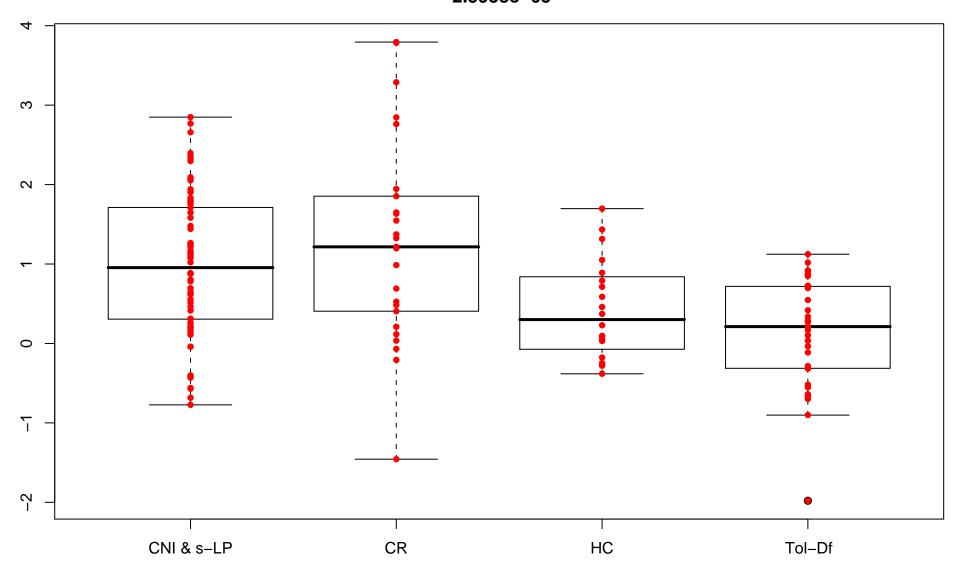
Rank 276: TACSTD2 2.3595e-05



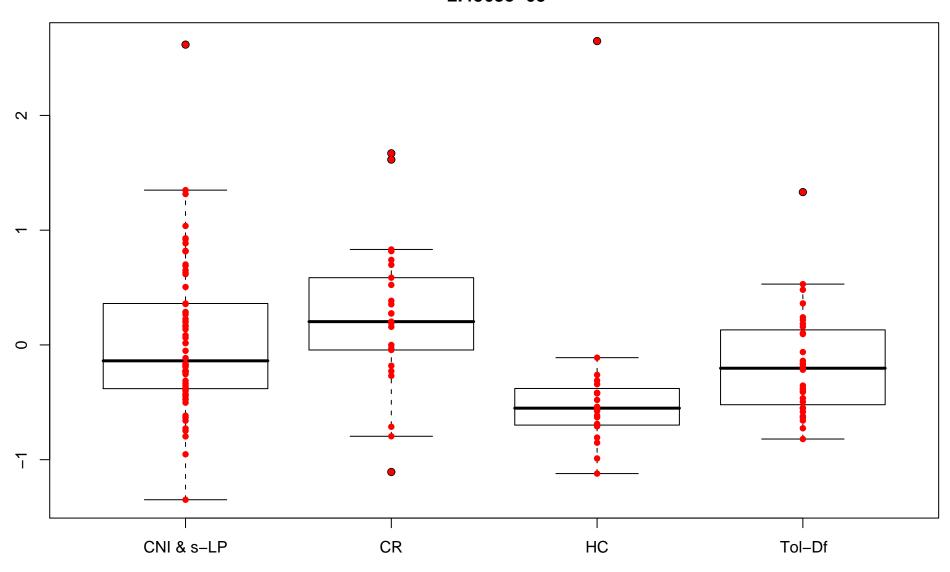
Rank 277 : KLF7 2.3807e-05



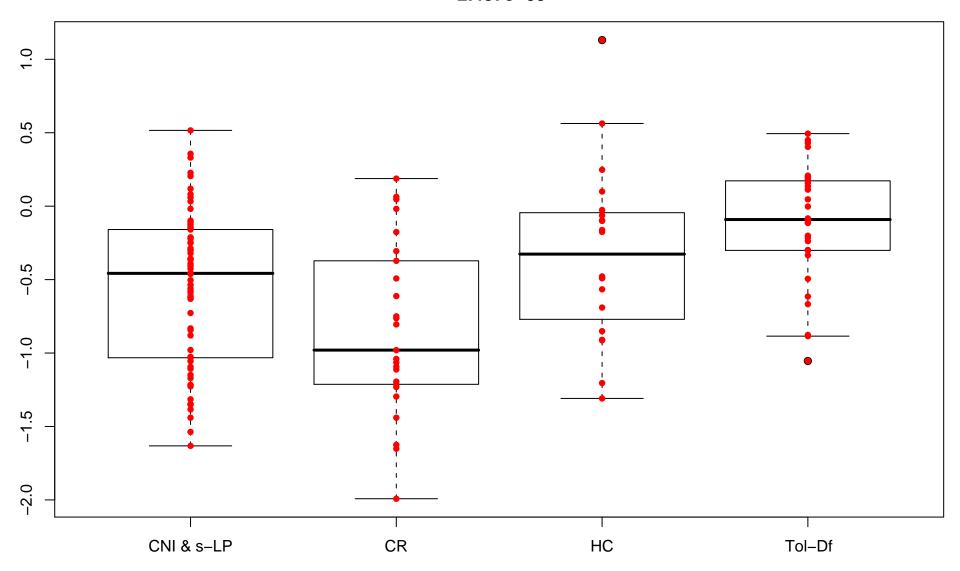
Rank 278 : THC2317292 2.3938e-05



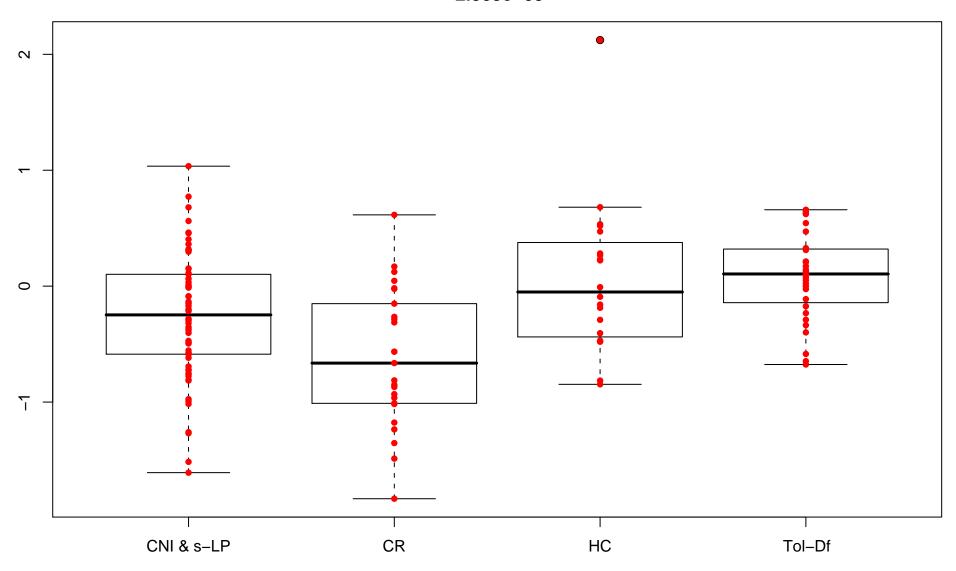
Rank 279 : FCER1G 2.4568e-05



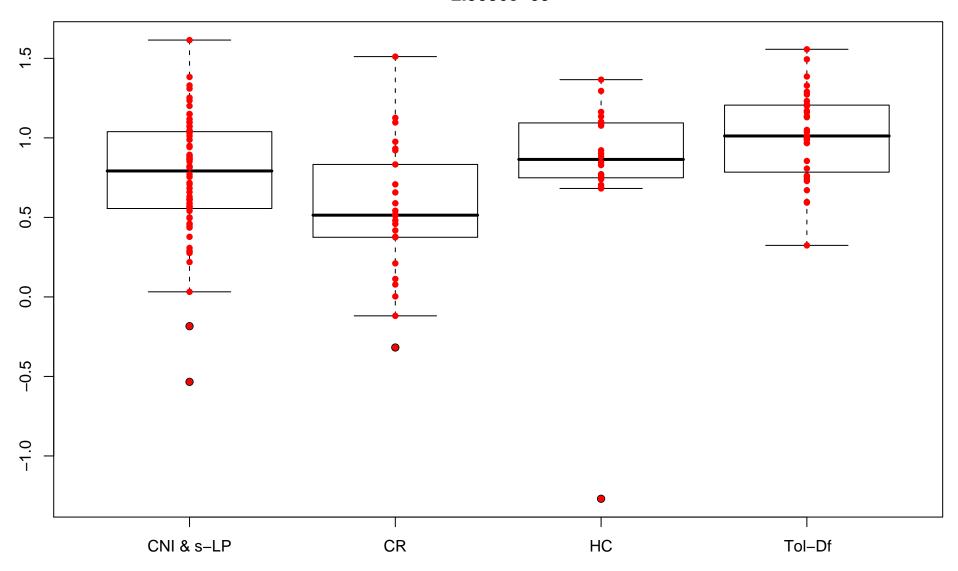
Rank 280 : SNHG5 2.457e-05



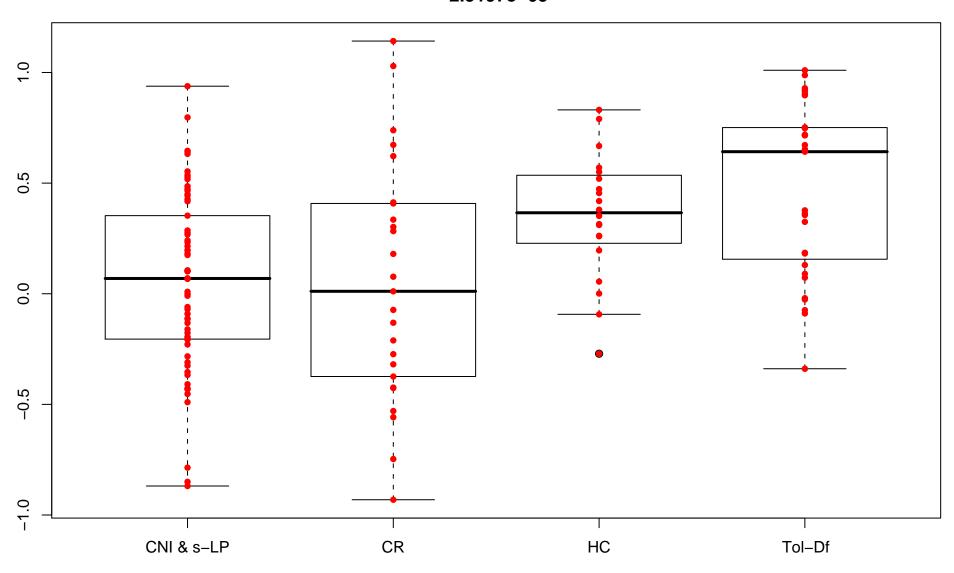
Rank 281 : CTSF 2.505e-05



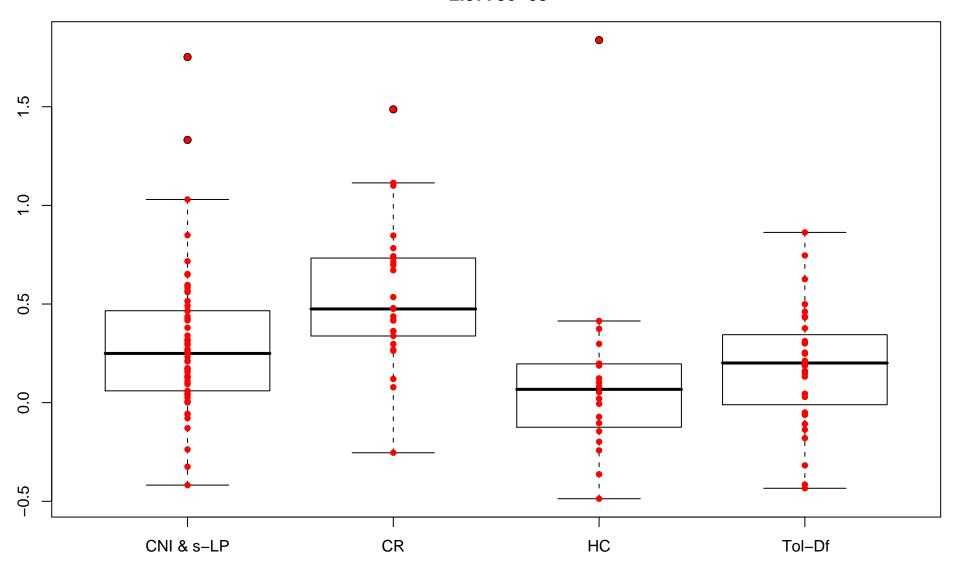
Rank 282 : UPF3A 2.5086e-05



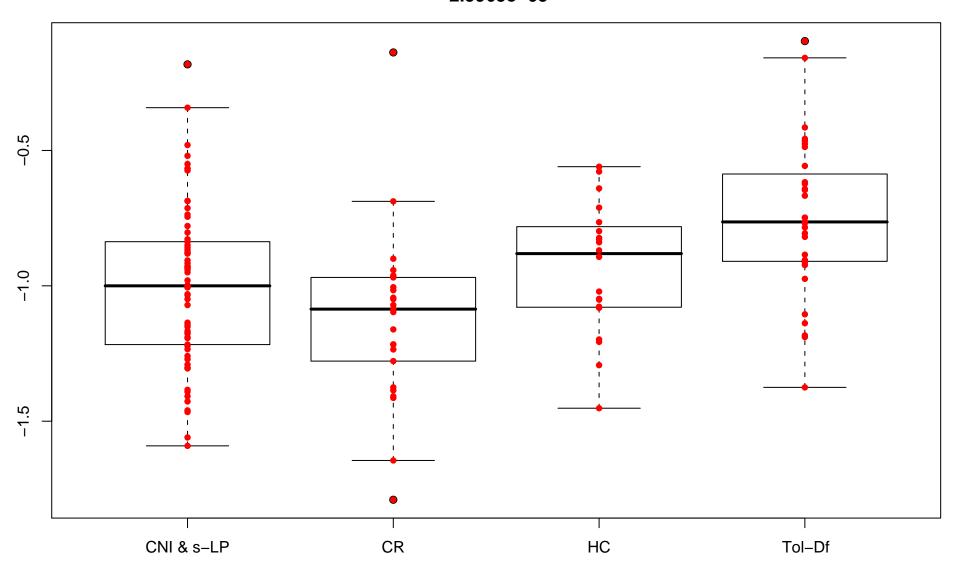
Rank 283 : CD81 2.5197e-05



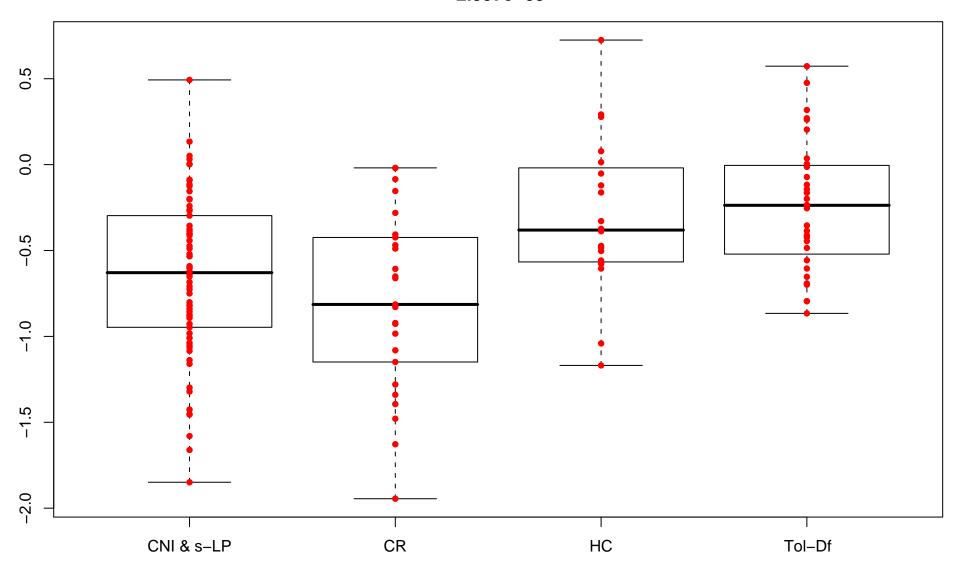
Rank 284 : CCDC88A 2.5778e-05



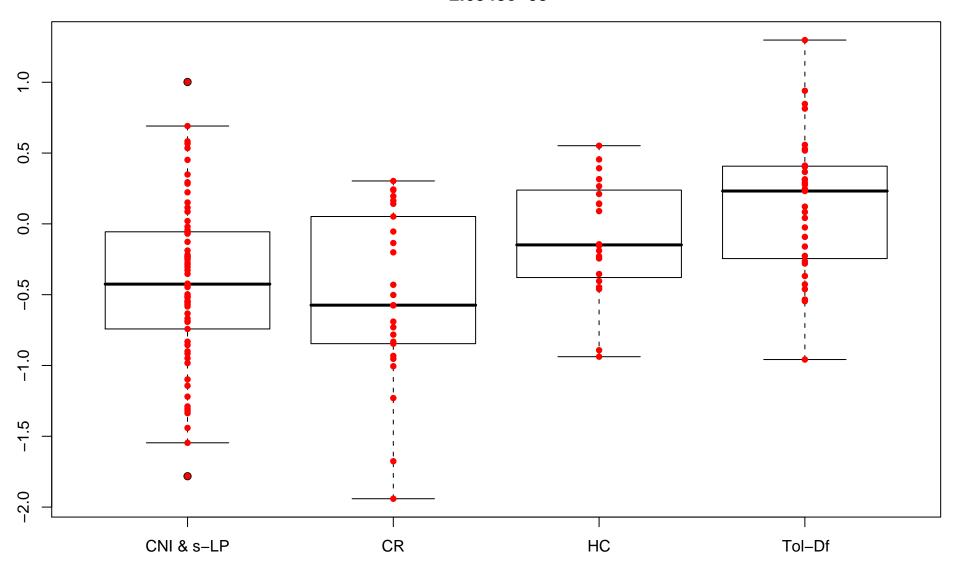
Rank 285 : DAD1 2.5965e-05



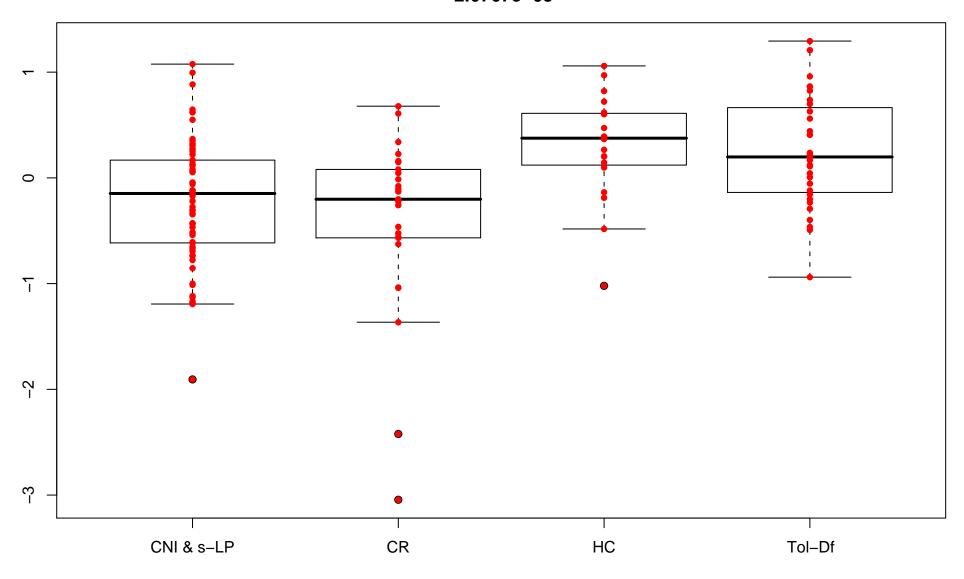
Rank 286 : EIF3E 2.597e-05



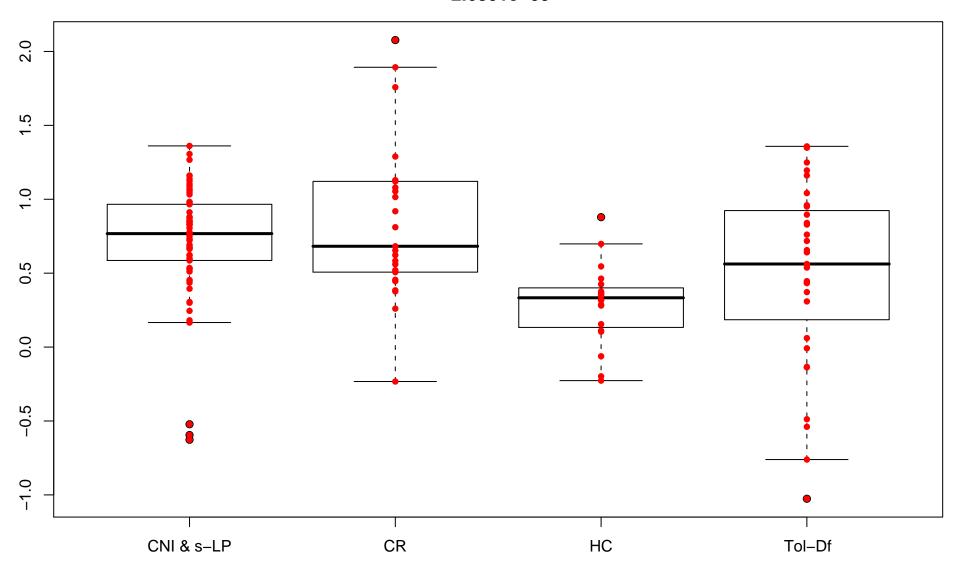
Rank 287: RPL14 2.6548e-05



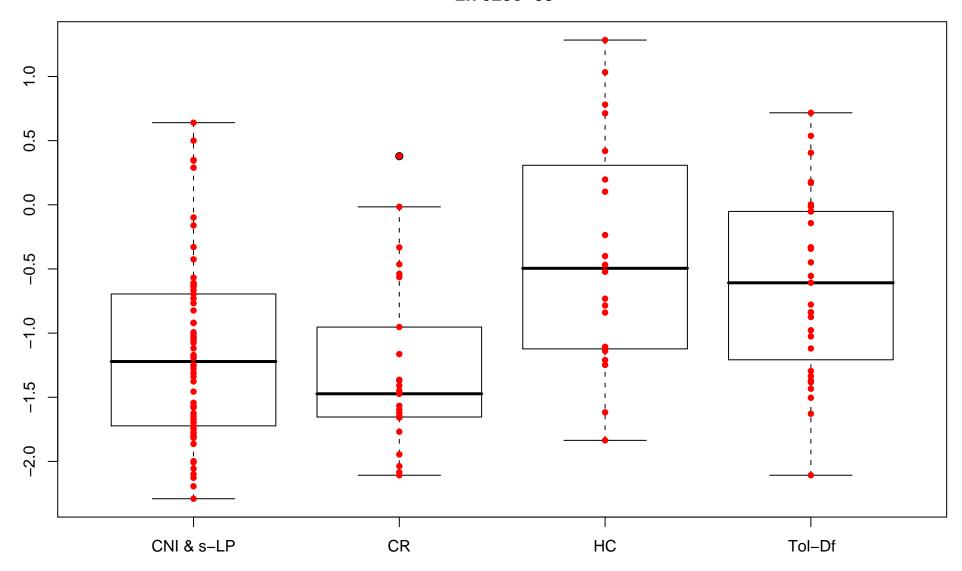
Rank 288 : HS3ST3B1 2.6767e-05



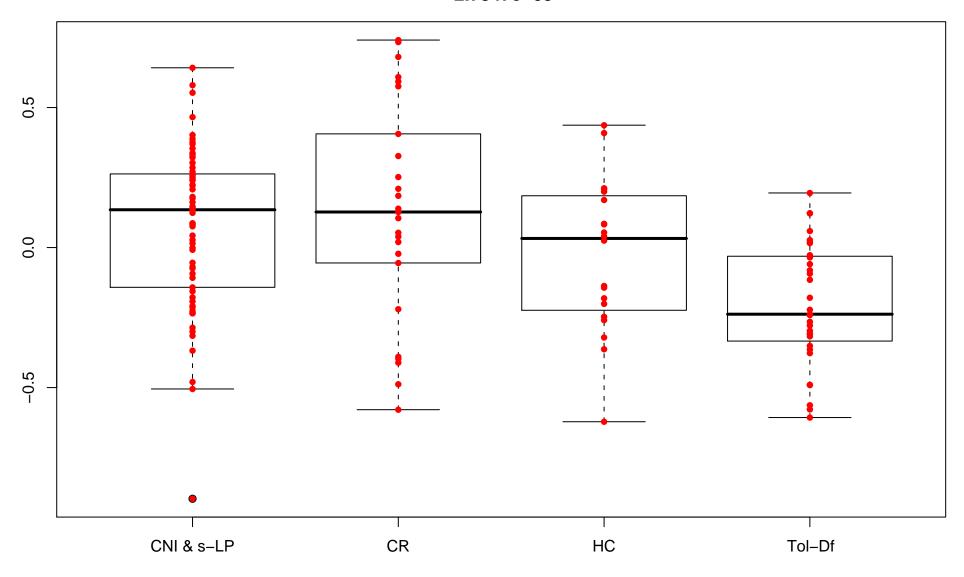
Rank 289 : ANKFY1 2.6801e-05



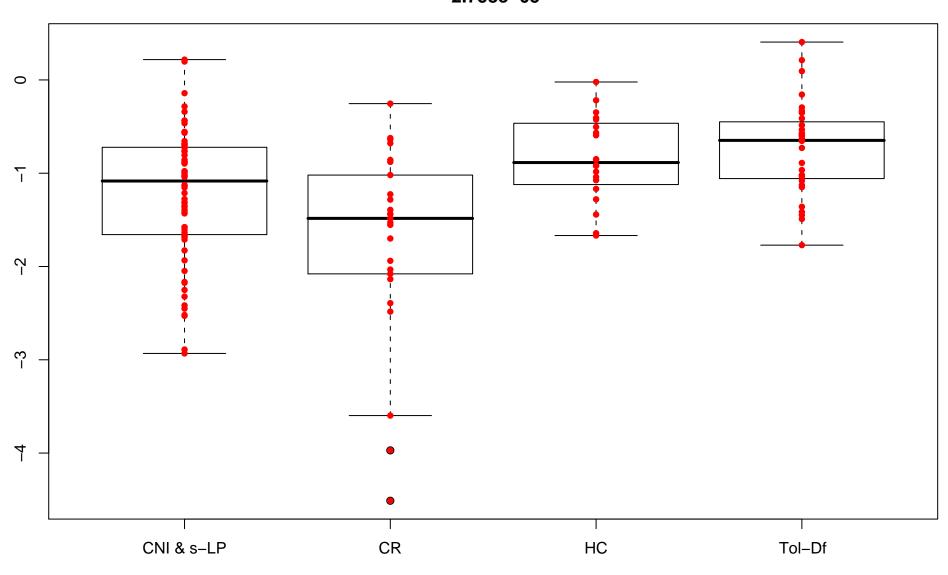
Rank 290 : LYPD1 2.7023e-05



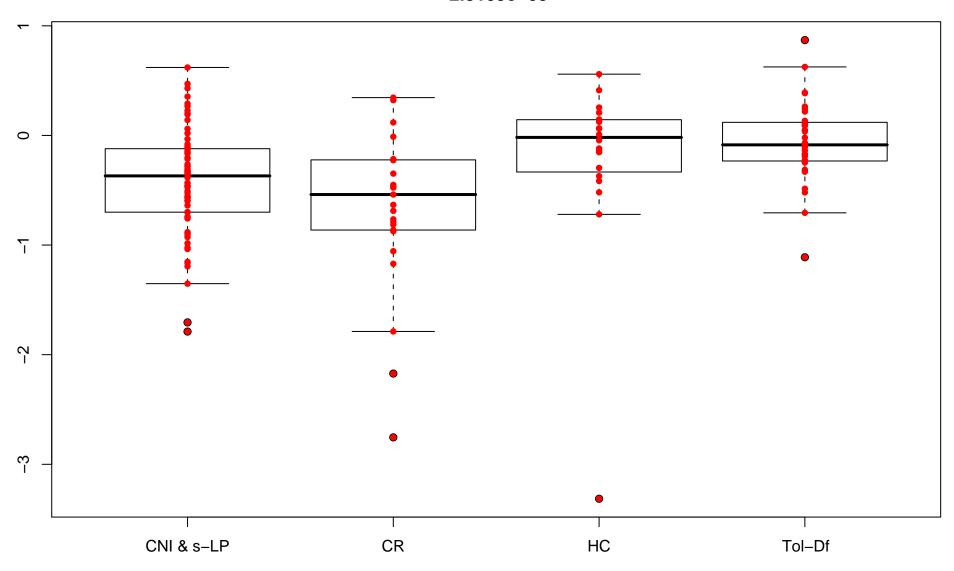
Rank 291 : DSE 2.7347e-05



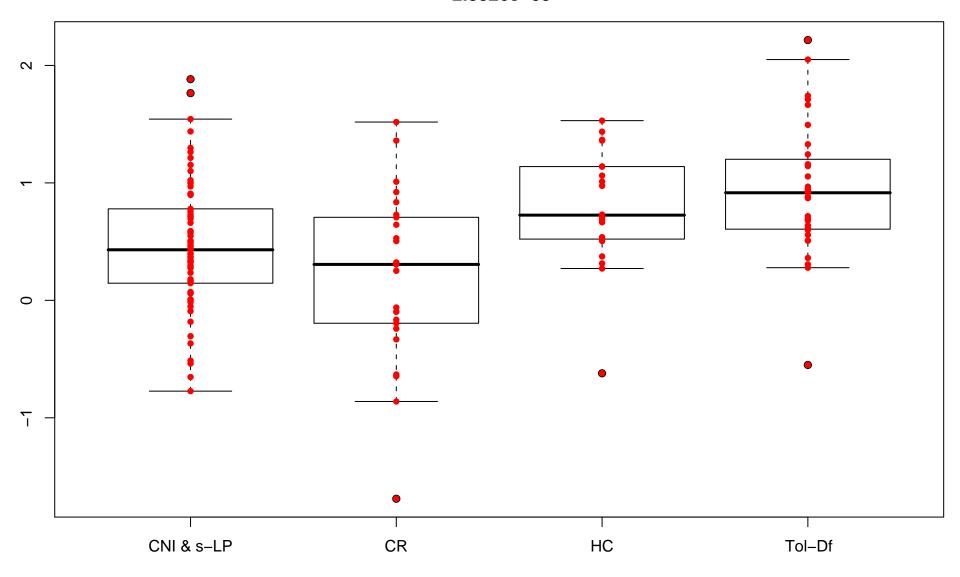
Rank 292 : CD3D 2.758e-05



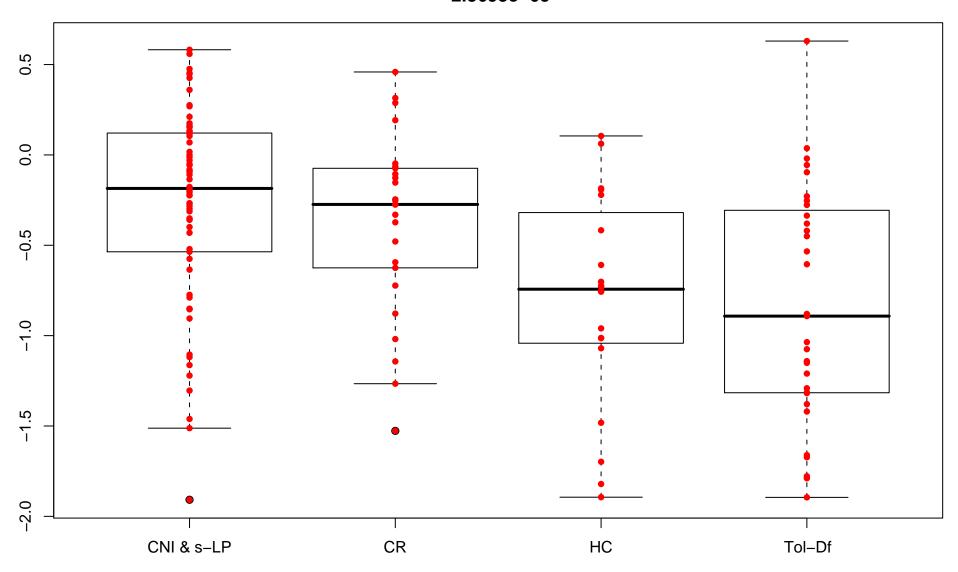
Rank 293 : TMEM106B 2.8109e-05



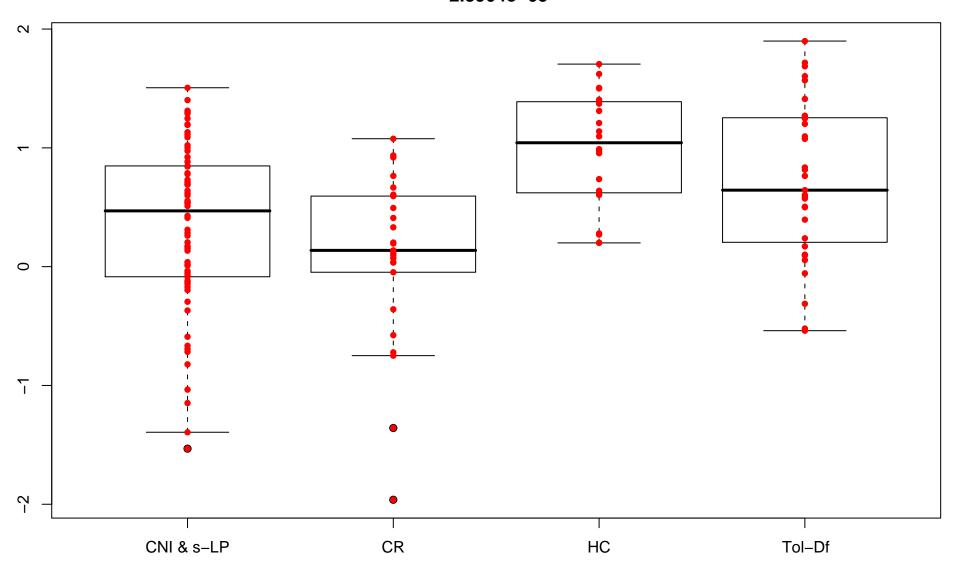
Rank 294 : CYFIP2 2.8326e-05



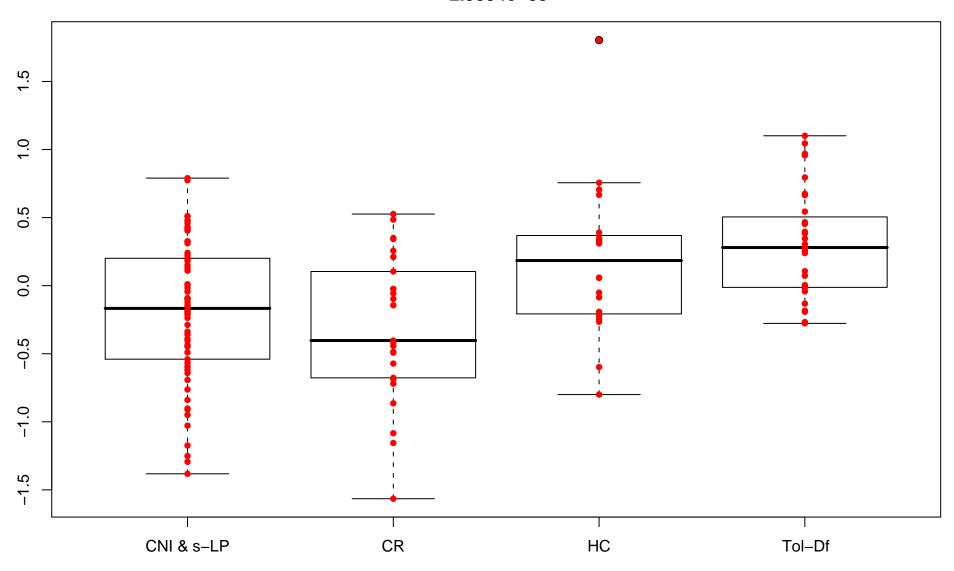
Rank 295 : LIN7A 2.8693e-05



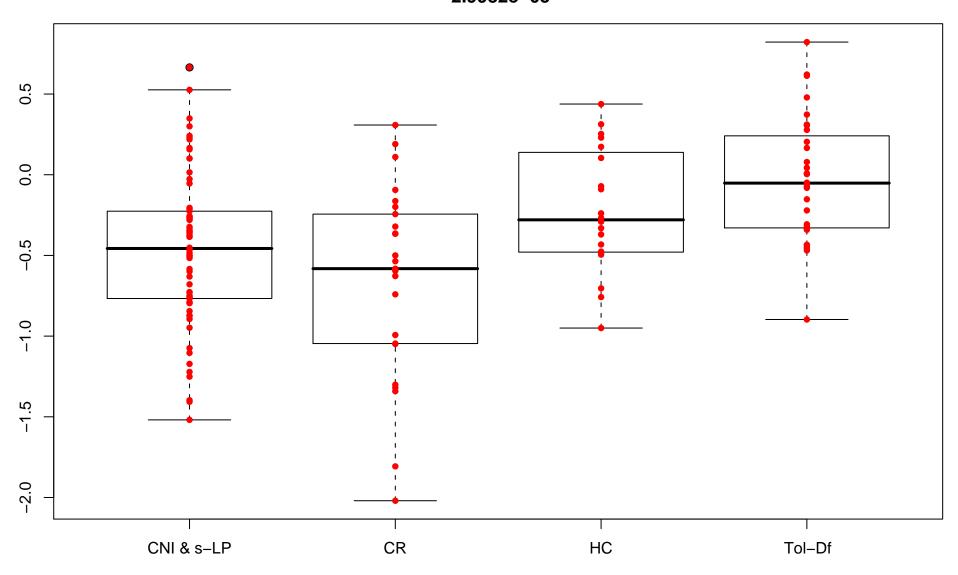
Rank 296 : ANK3 2.8904e-05



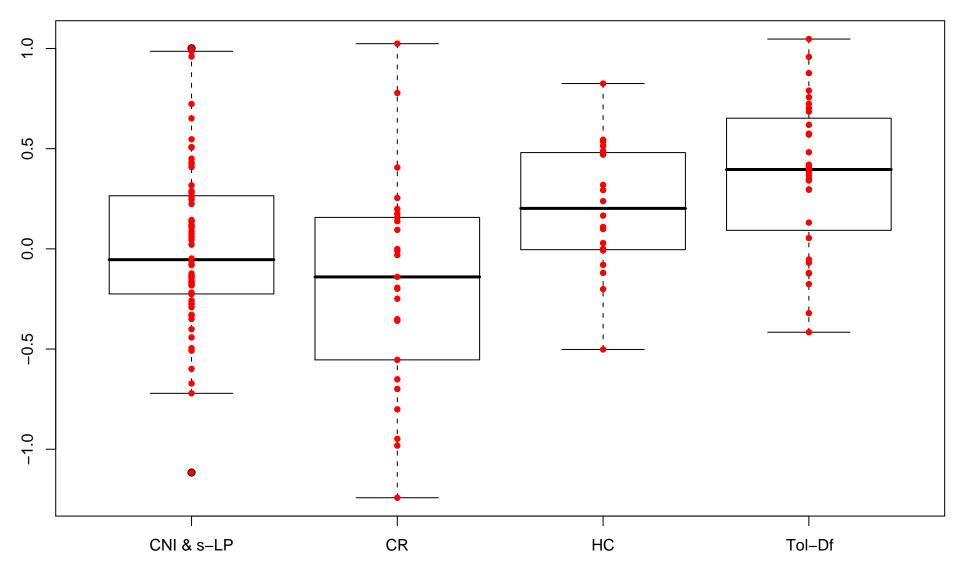
Rank 297: RPL23 2.9594e-05



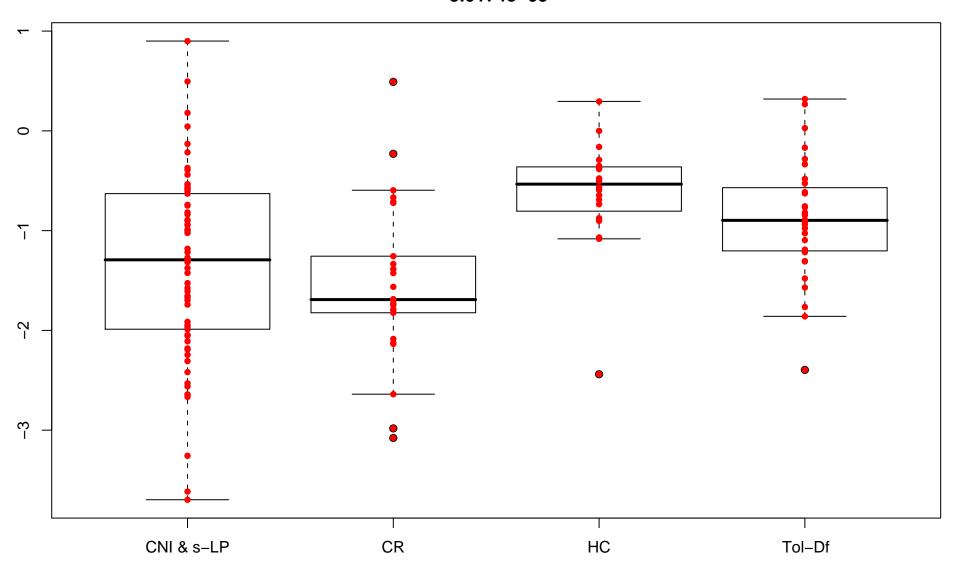
Rank 298 : PTPLAD1;LOC732402 2.9982e-05



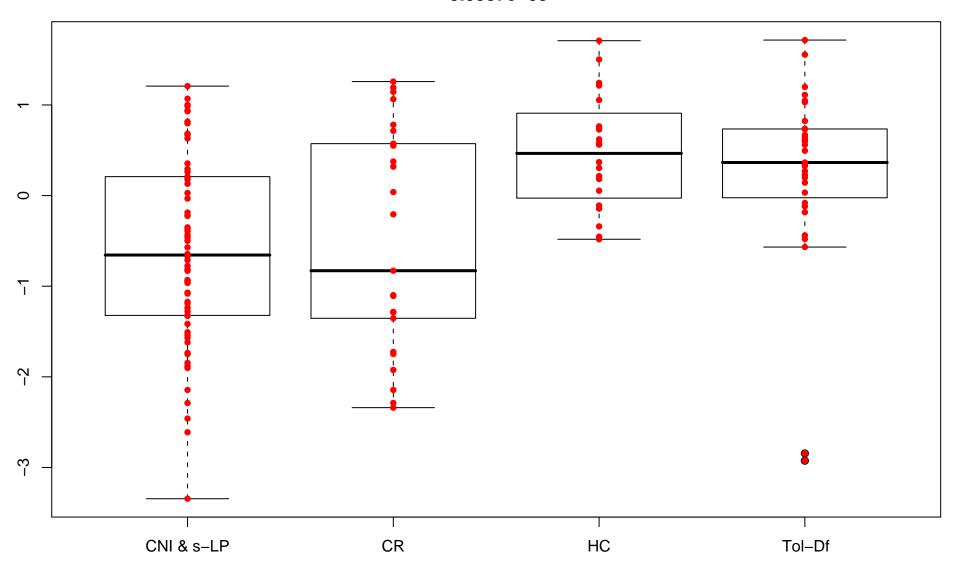
Rank 299: LYCAT 3.0133e-05



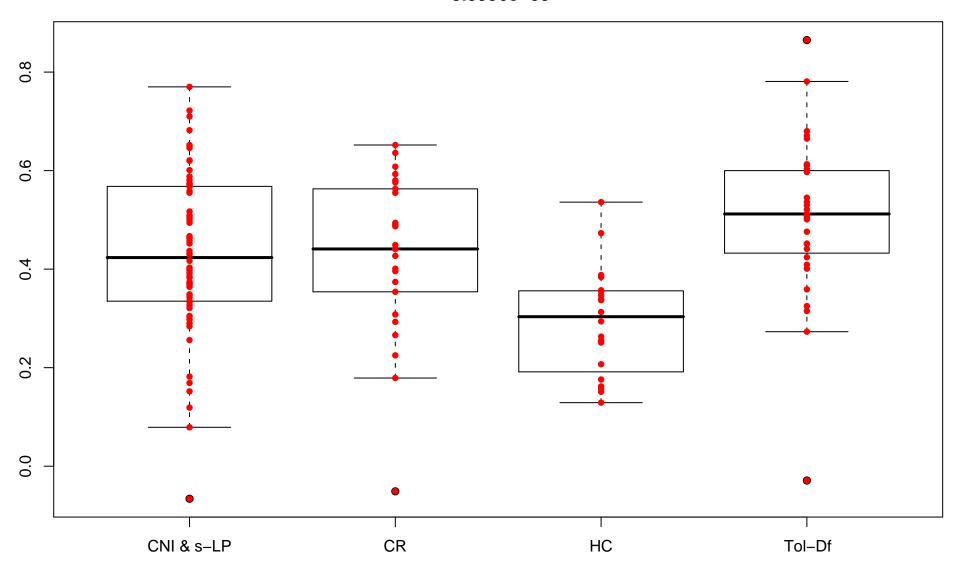
Rank 300 : MAD2L1 3.0174e-05



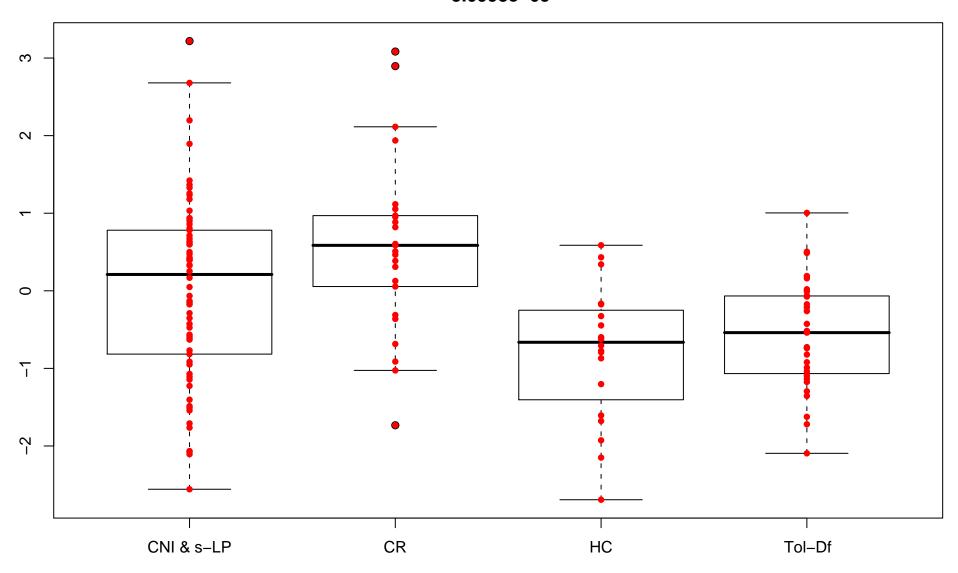
Rank 301 : FCRL5 3.0387e-05



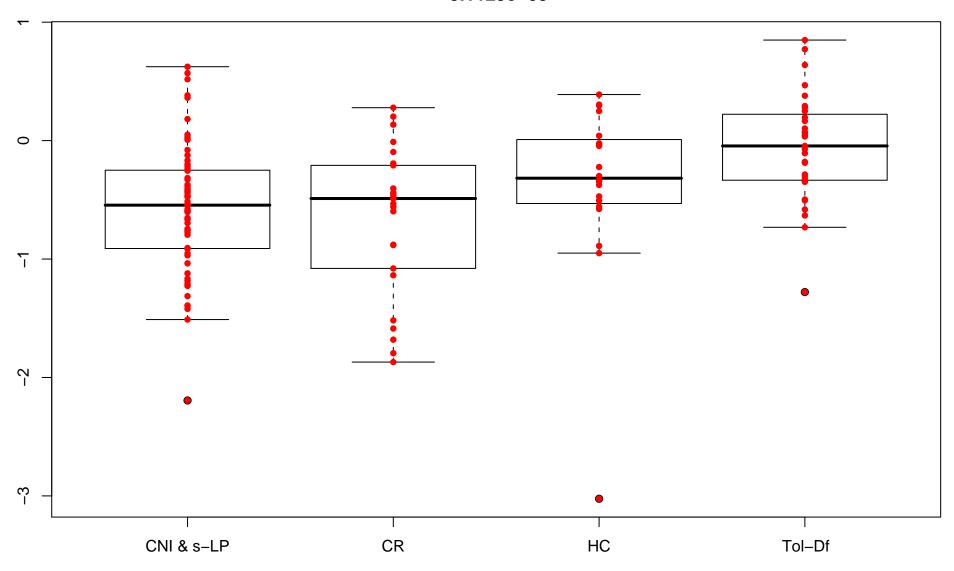
Rank 302 : PITPNM1 3.0996e-05



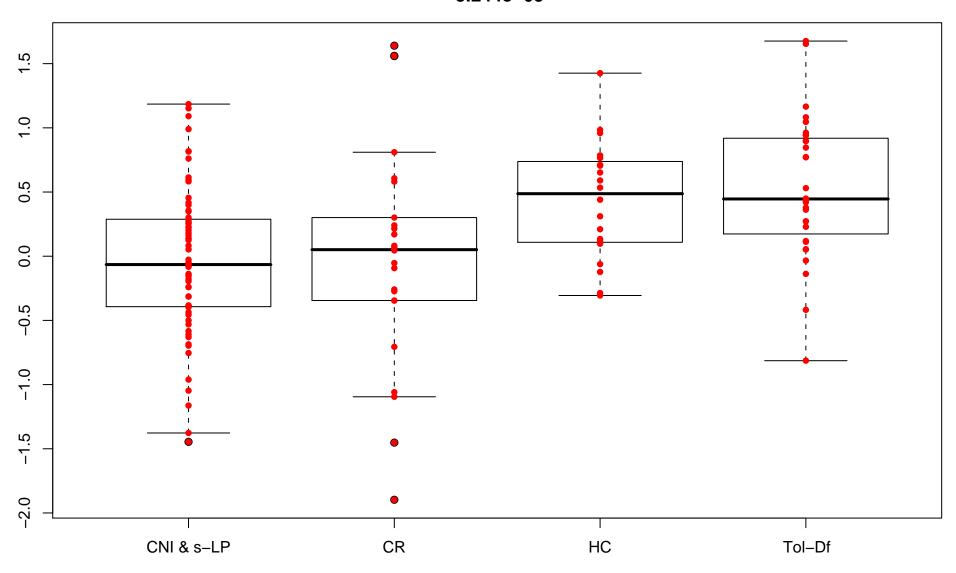
Rank 303 : C1QB 3.0998e-05



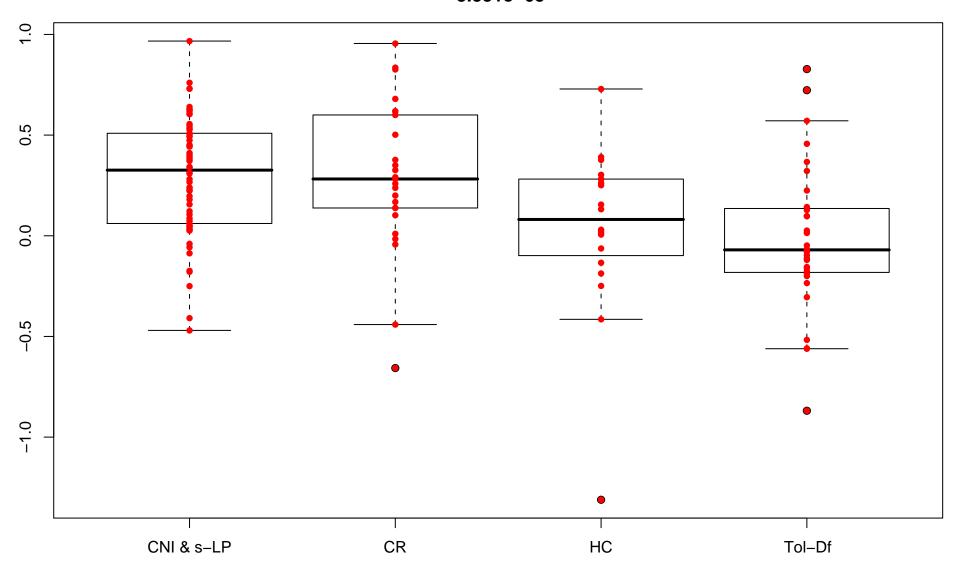
Rank 304 : RPL15 3.1129e-05



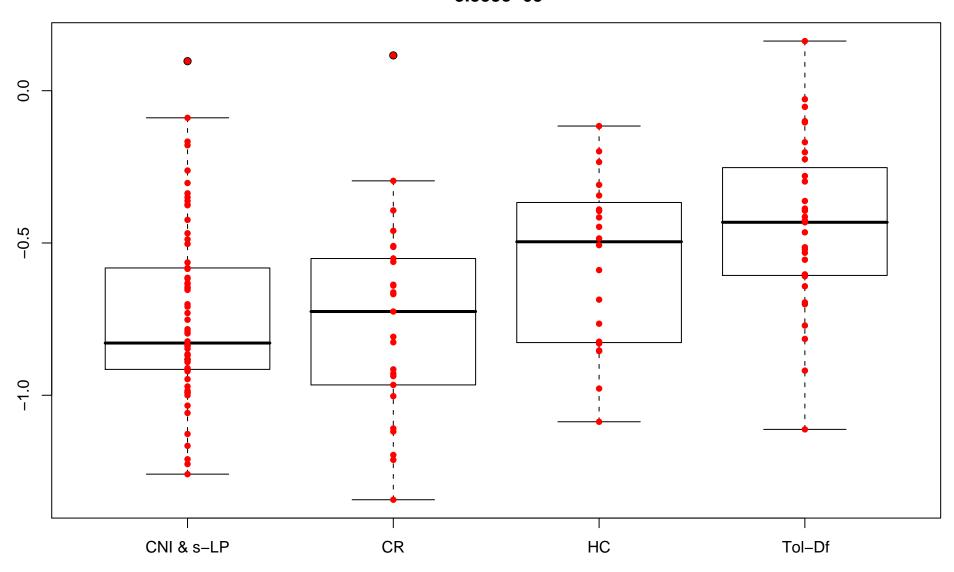
Rank 305 : DDR1 3.244e-05



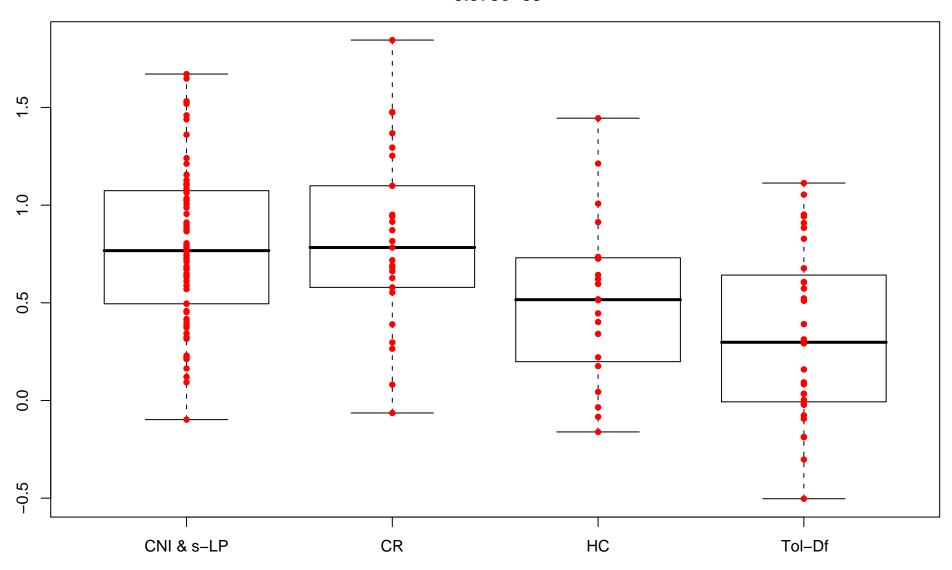
Rank 306 : SERPINA1 3.551e-05



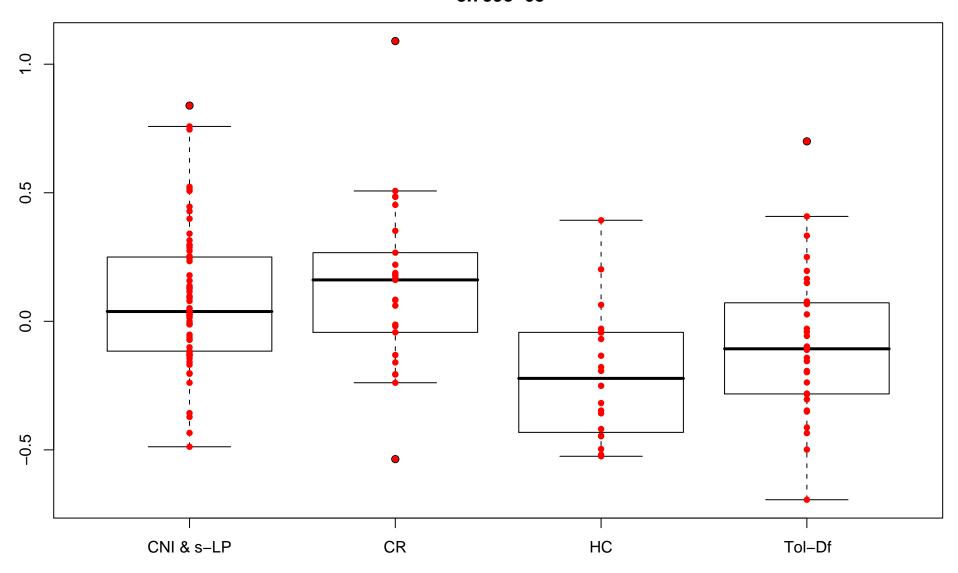
Rank 307 : COX6A1 3.555e-05



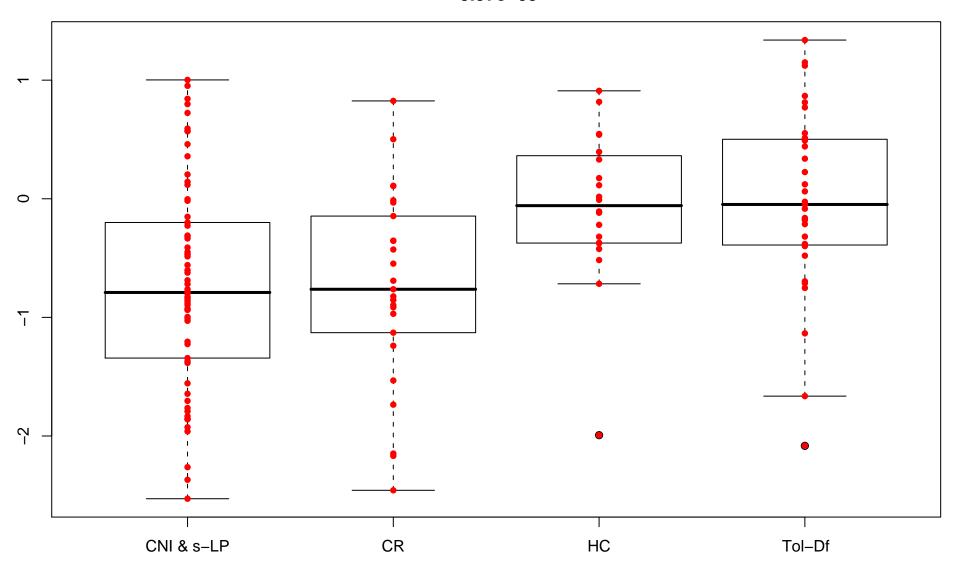
Rank 308 : RASGRP4 3.575e-05



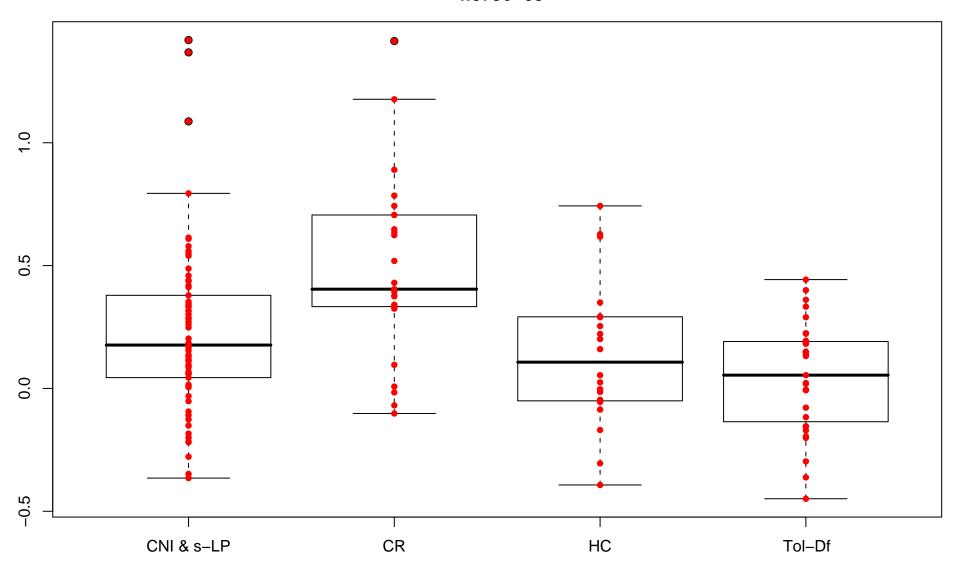
Rank 309 : PCTK1 3.759e-05



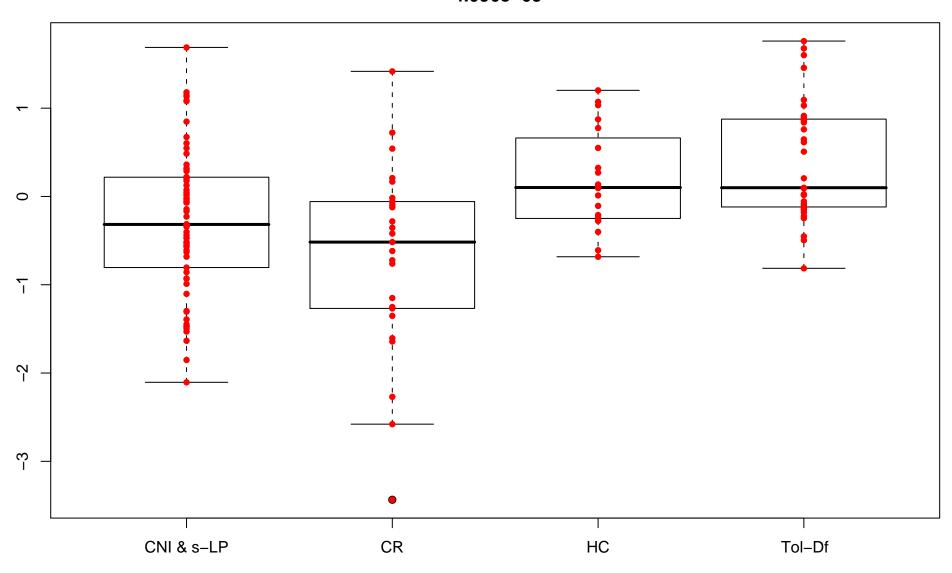
Rank 310: THAP2 3.97e-05



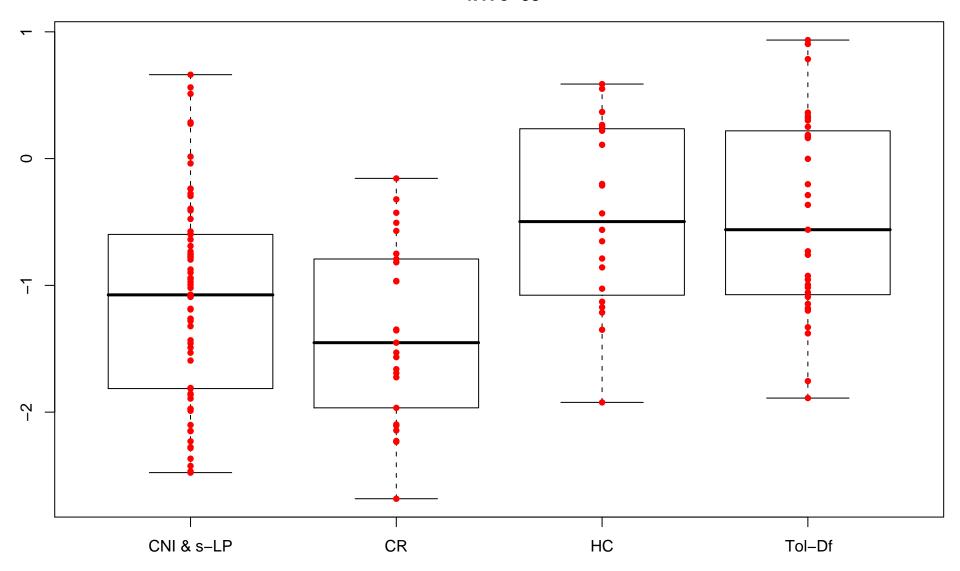
Rank 311 : CTSB 4.079e-05



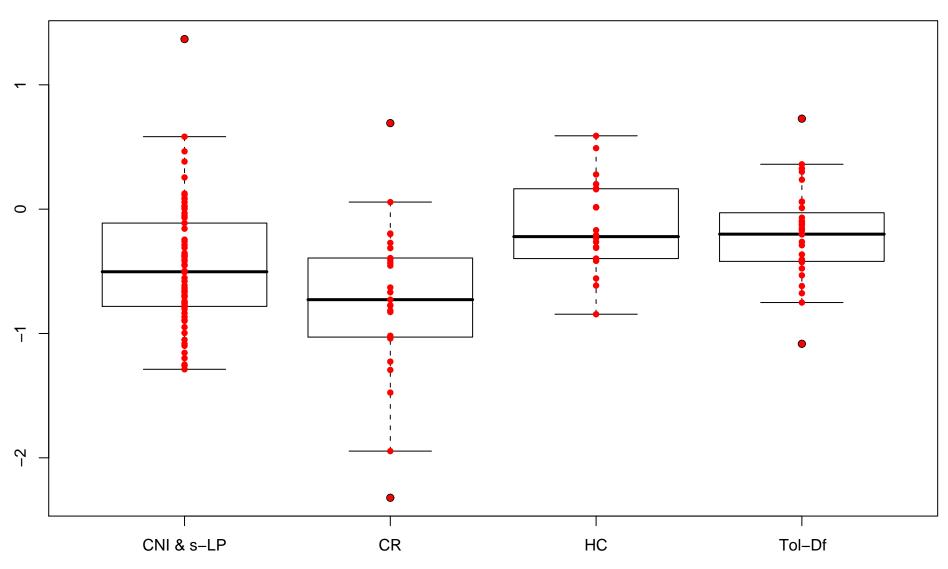
Rank 312: TRA@ 4.096e-05



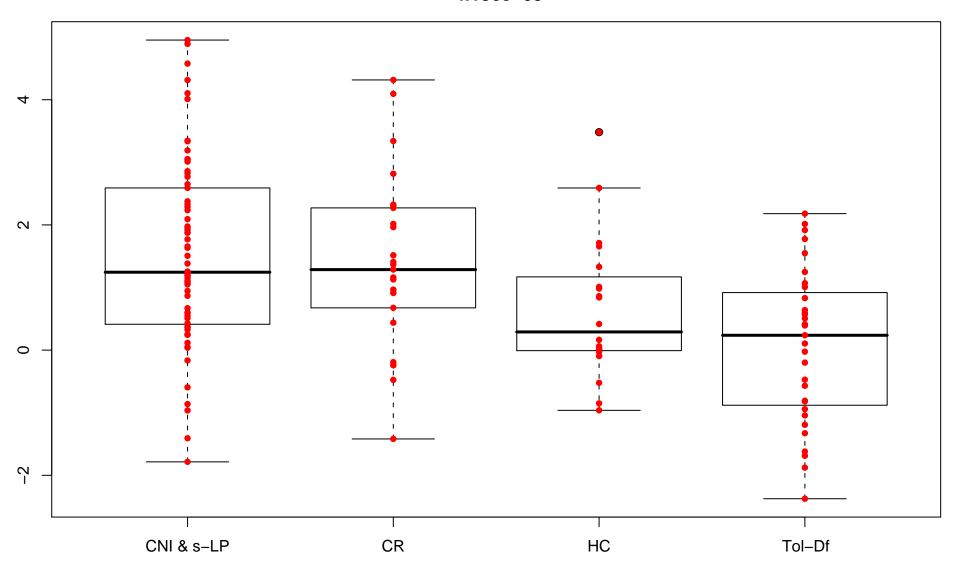
Rank 313 : ATP8A2 4.17e-05



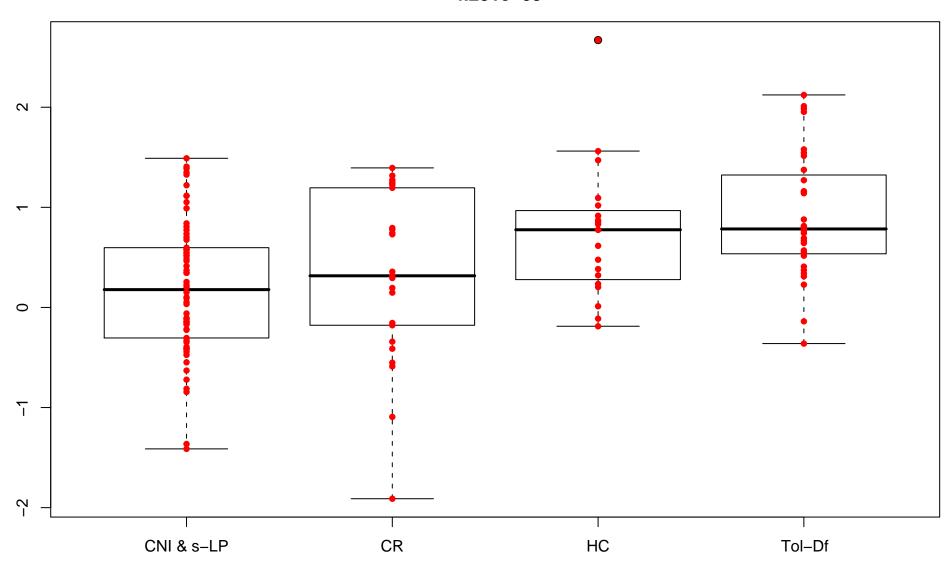
Rank 314 : UBE2T 4.178e-05



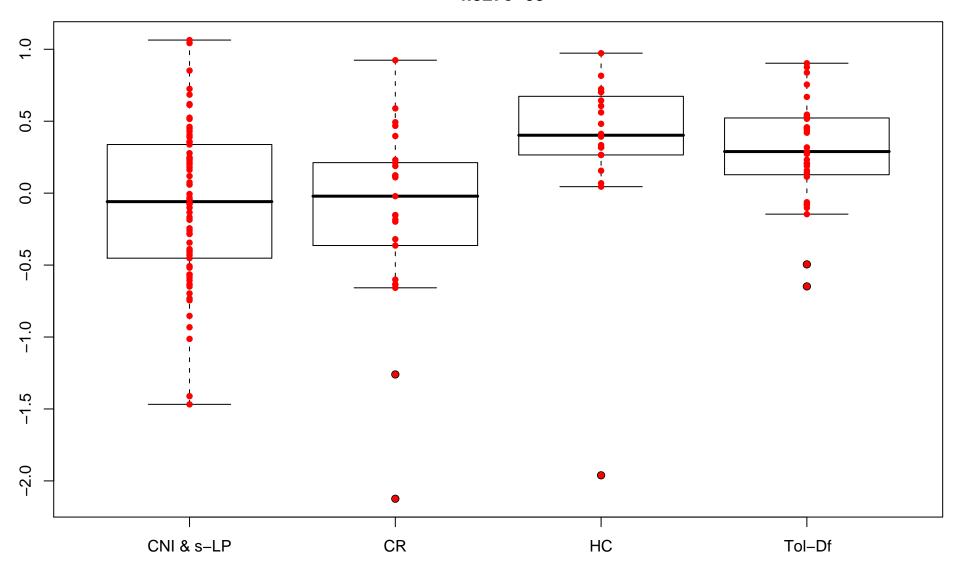
Rank 315 : LTF 4.186e-05



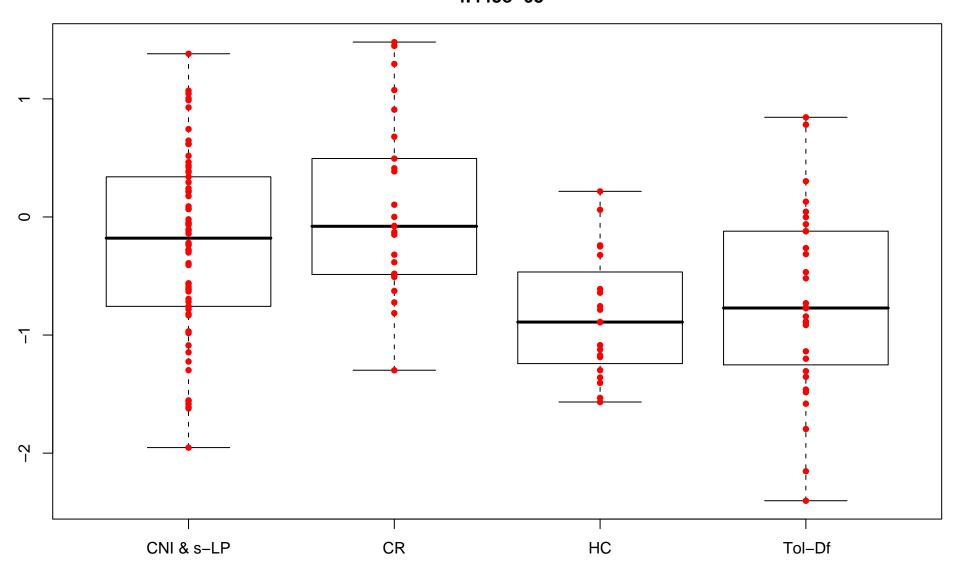
Rank 316 : AKAP2 4.231e-05



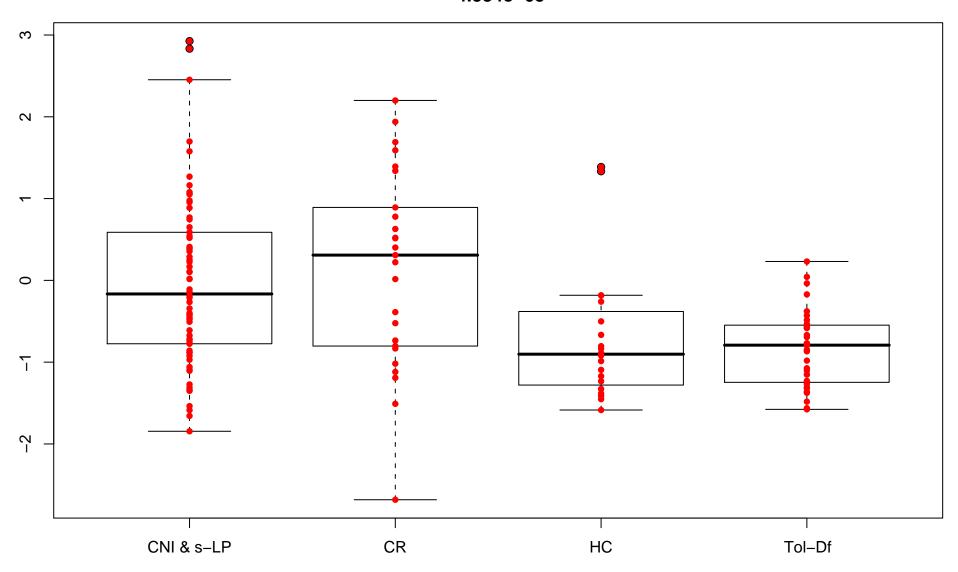
Rank 317: THUMPD1 4.327e-05



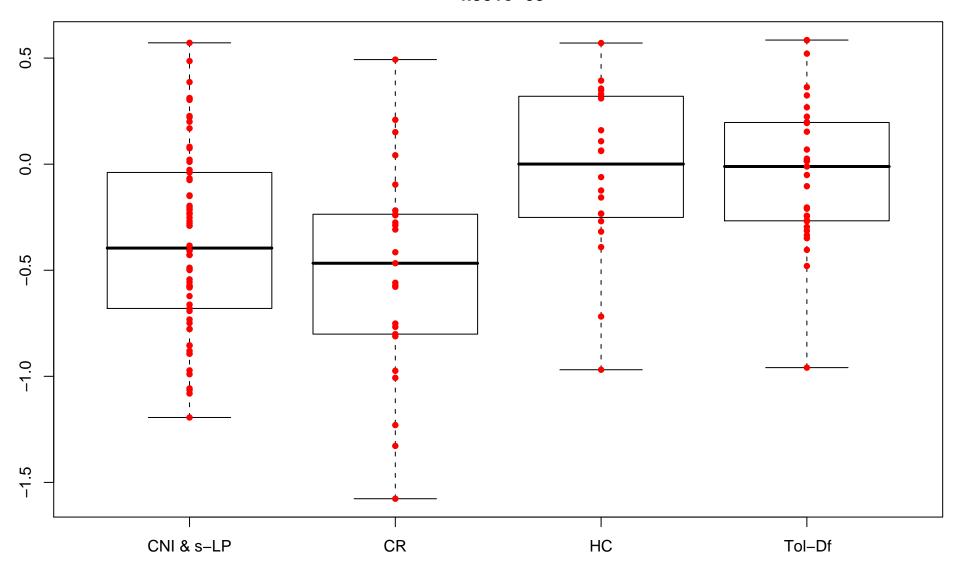
Rank 318 : FCGR1A 4.445e-05



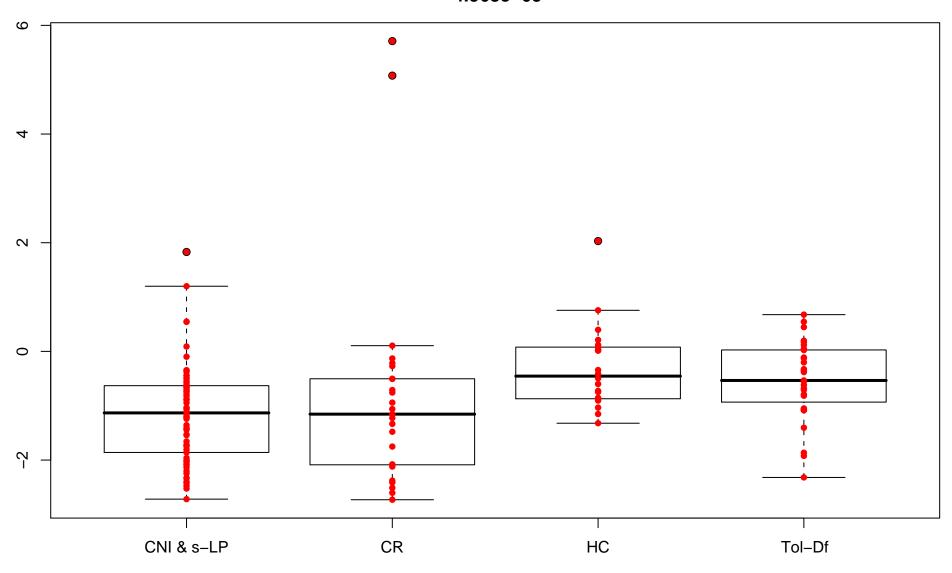
Rank 319 : RETN 4.534e-05



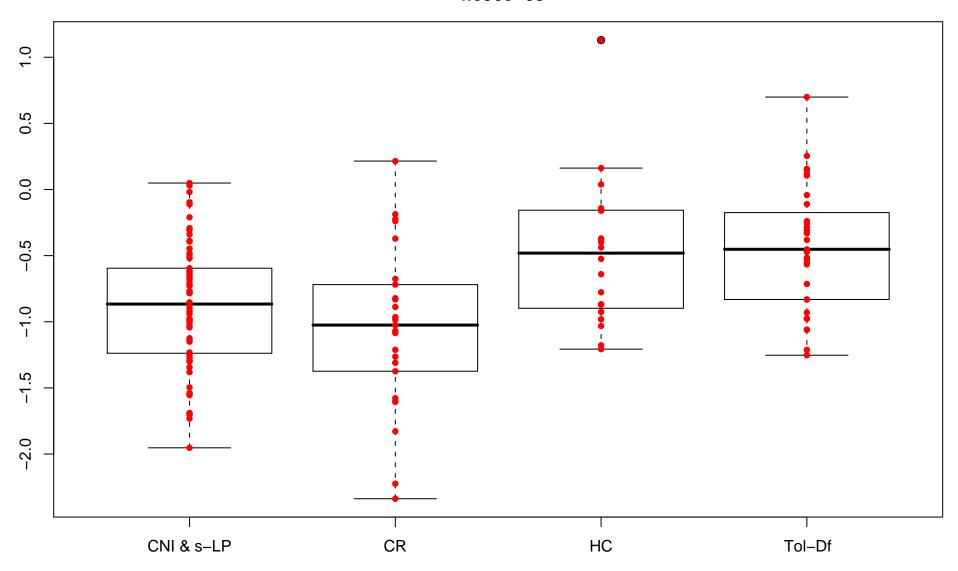
Rank 320 : NUDCD2 4.551e-05



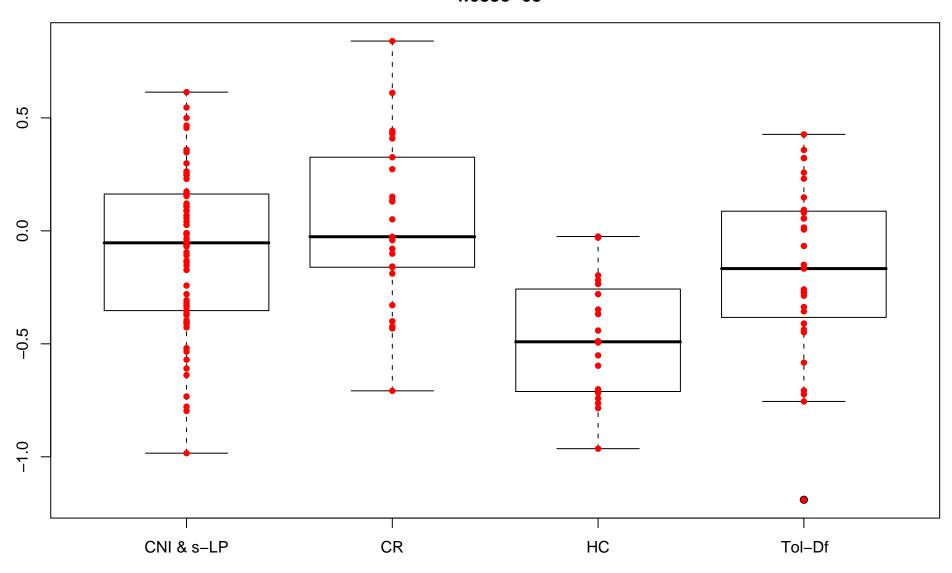
Rank 321 : LOC645638 4.568e-05



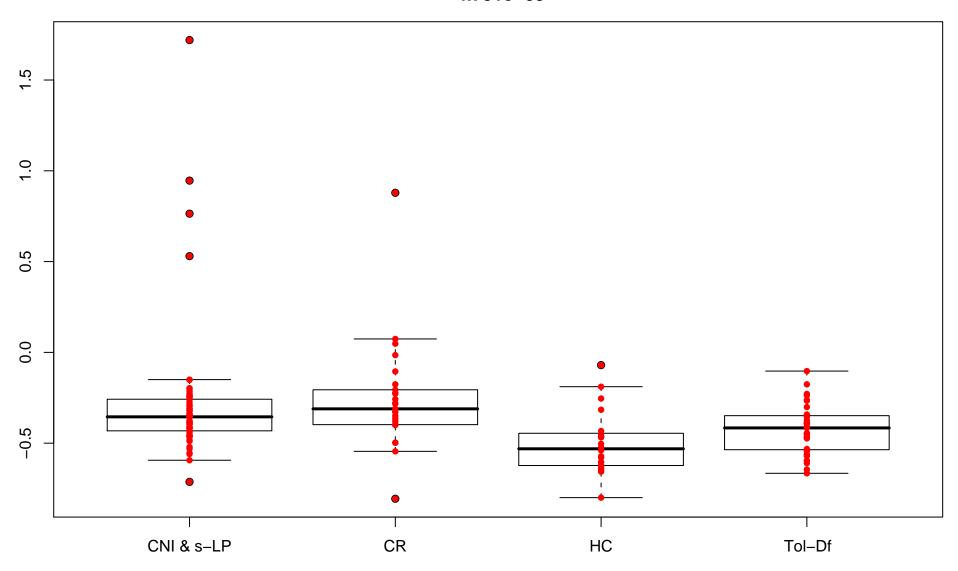
Rank 322 : PTPRCAP 4.656e-05



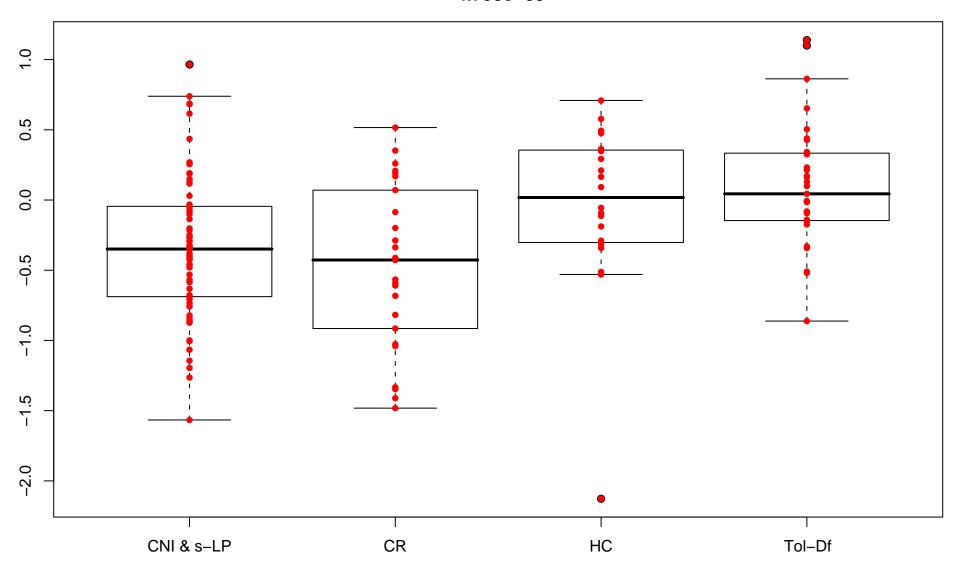
Rank 323 : C14ORF106 4.683e-05



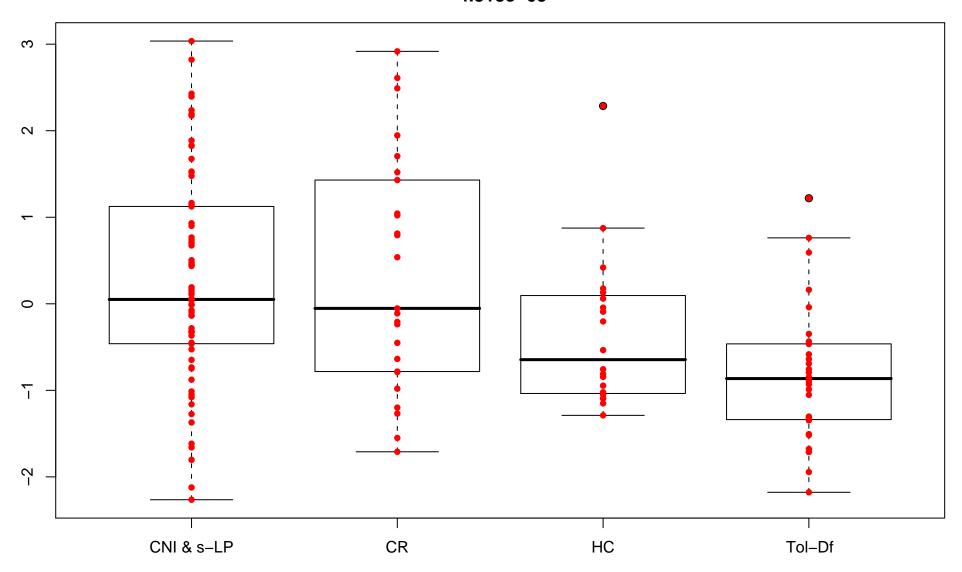
Rank 324 : AF314543 4.751e-05



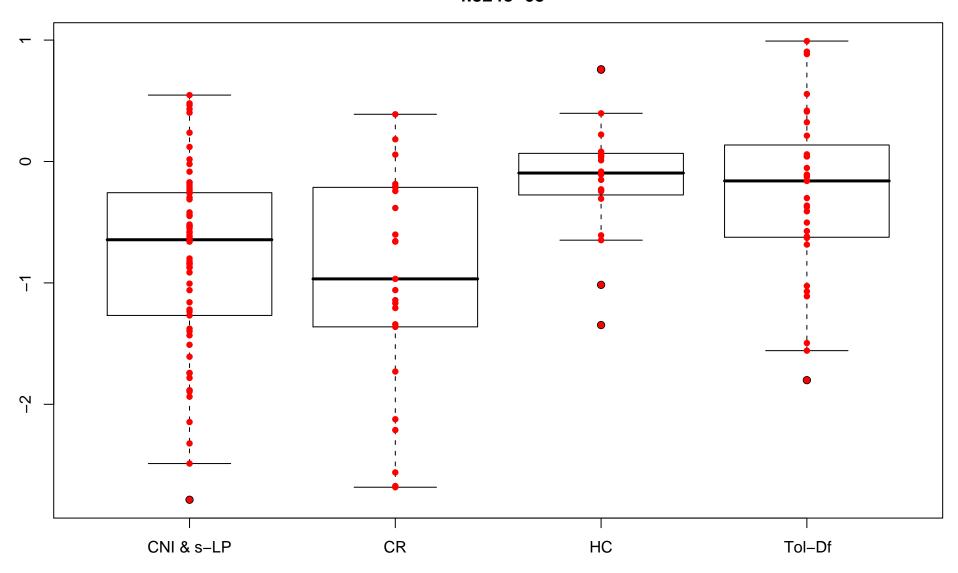
Rank 325 : A\_24\_P850187 4.798e-05



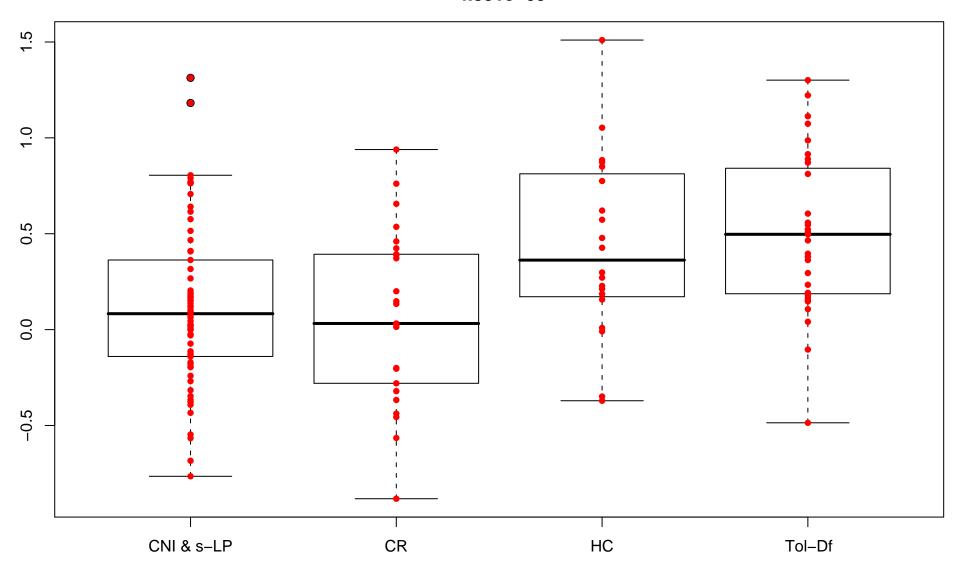
Rank 326 : CHIT1 4.818e-05



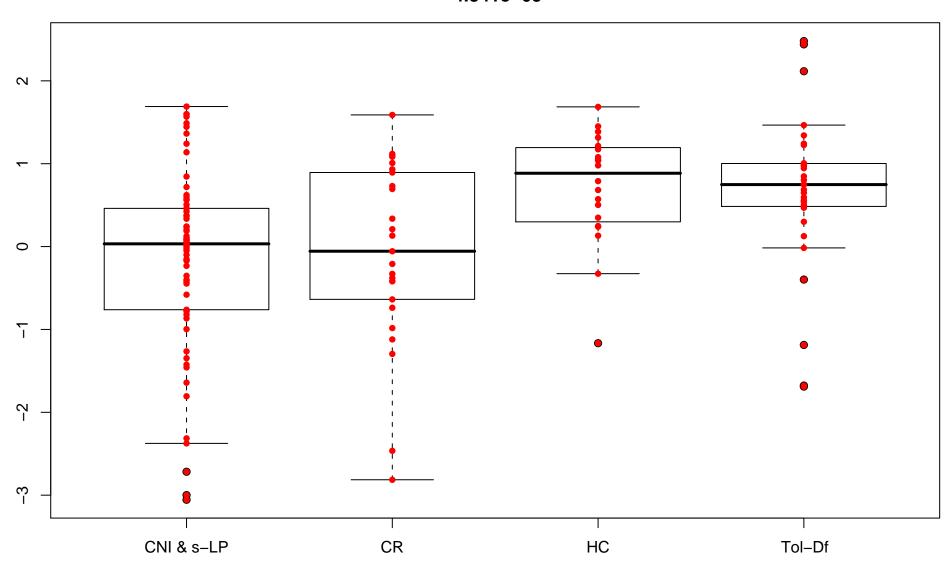
Rank 327 : PDE8B 4.824e-05



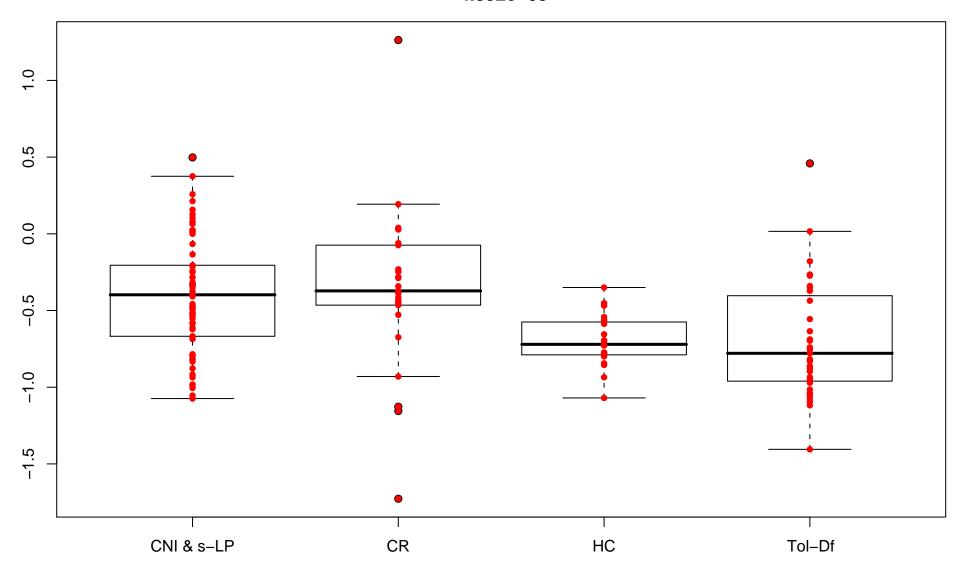
Rank 328 : HSPA9 4.831e-05



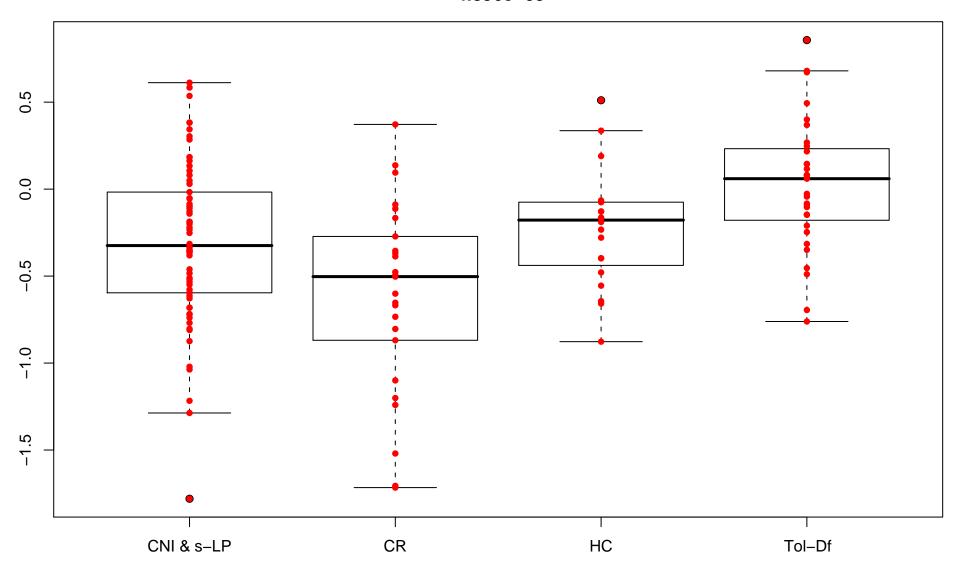
Rank 329 : SH2D1B 4.841e-05



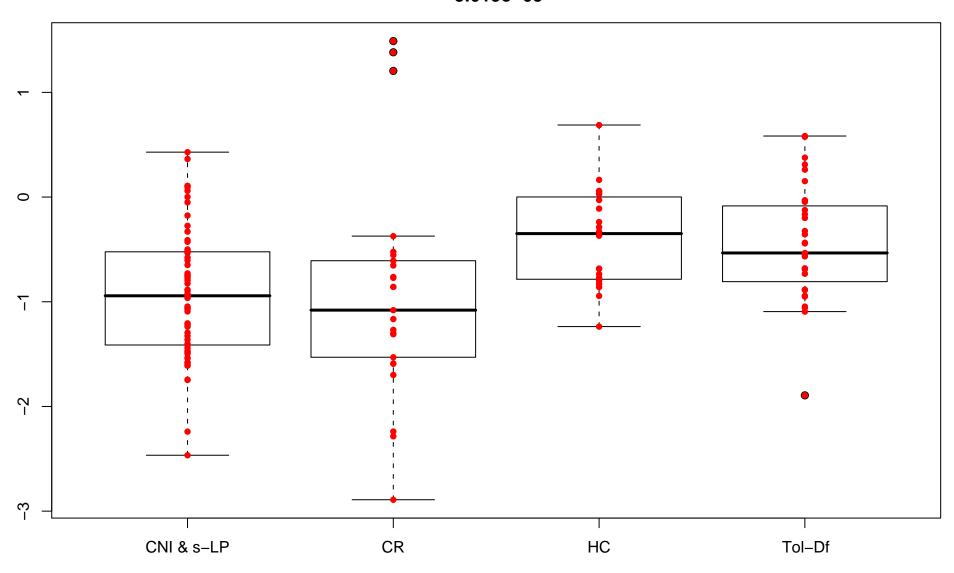
Rank 330 : MEF2A 4.892e-05



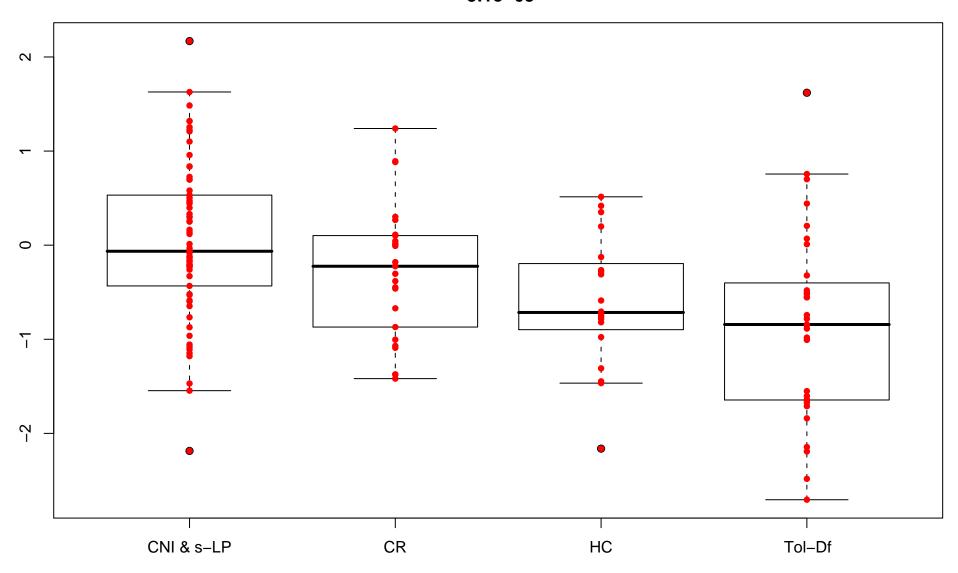
Rank 331 : TMTC3 4.896e-05



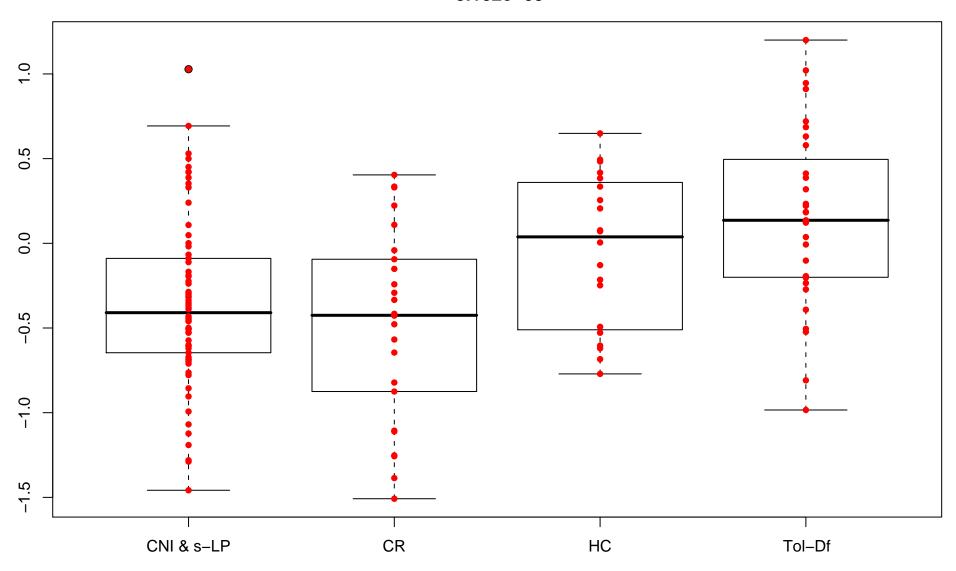
Rank 332 : MIRN155 5.019e-05



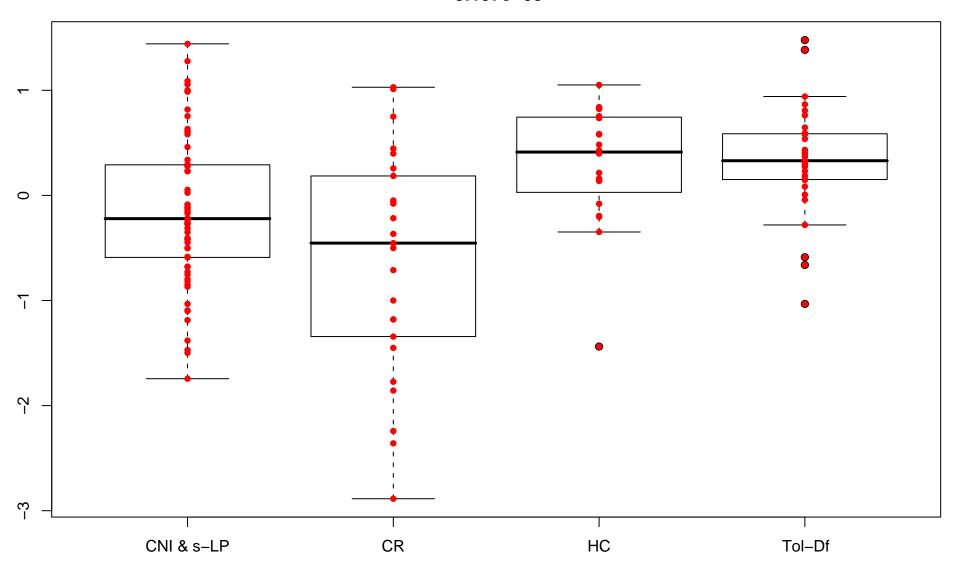
Rank 333 : GALNT14 5.1e-05



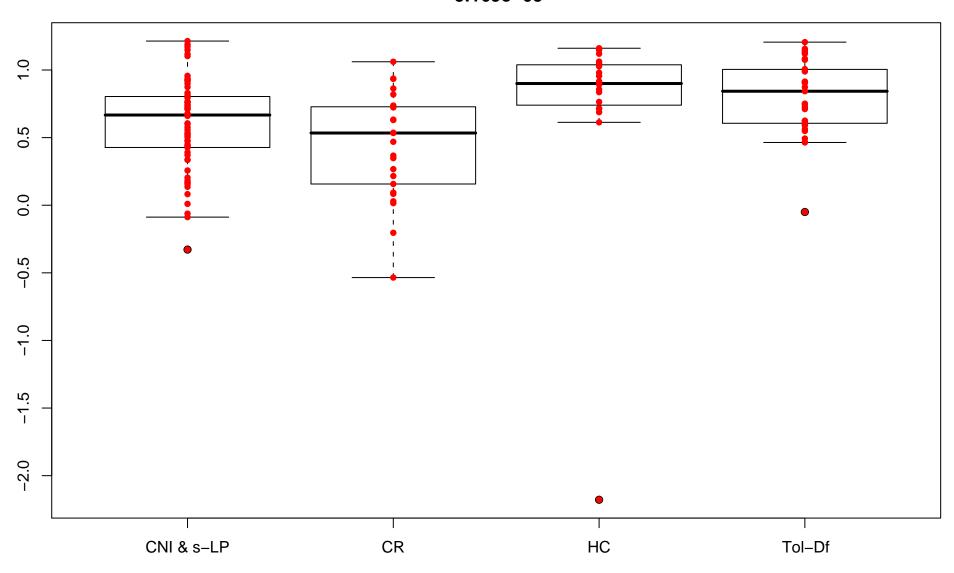
Rank 334 : PPIA 5.102e-05



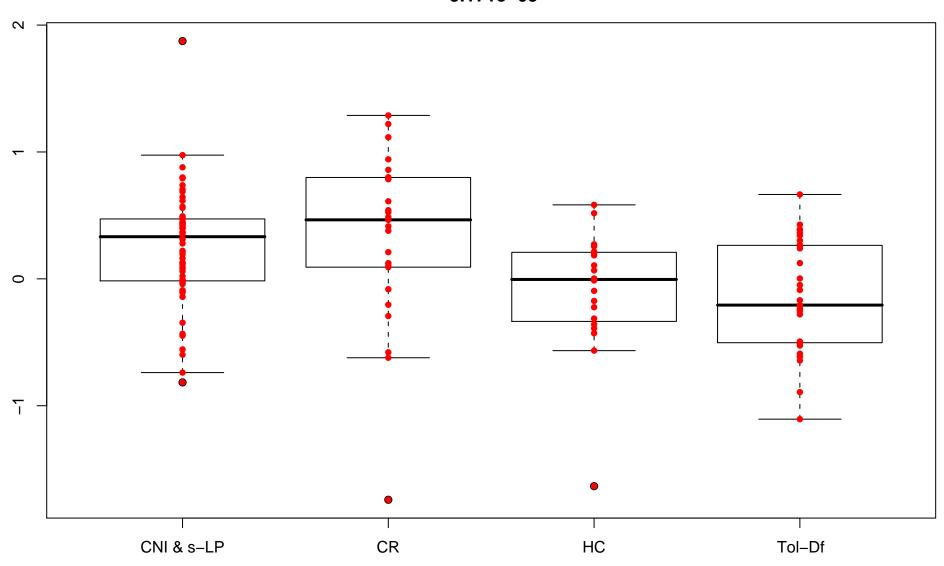
Rank 335 : BCKDHB 5.157e-05



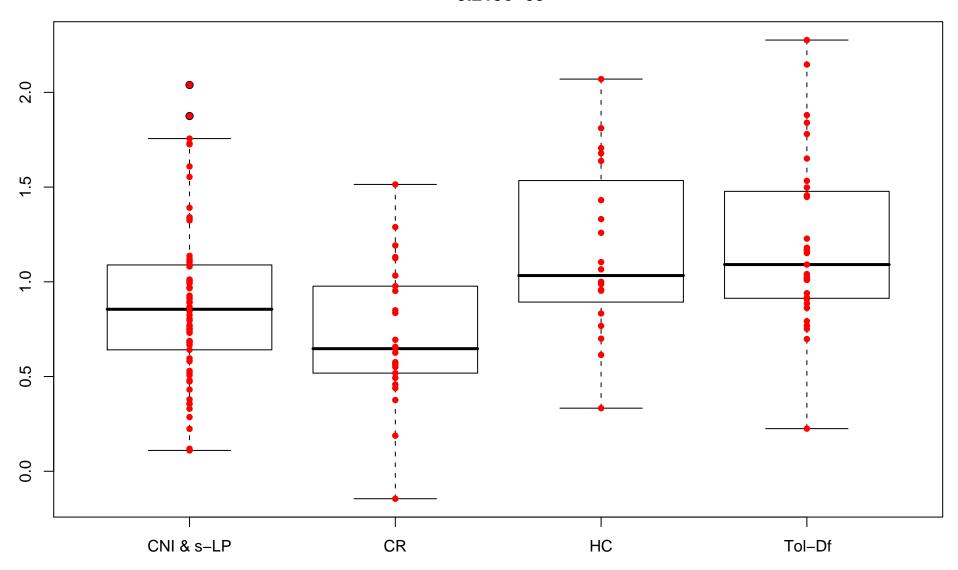
Rank 336 : SFRS2 5.169e-05



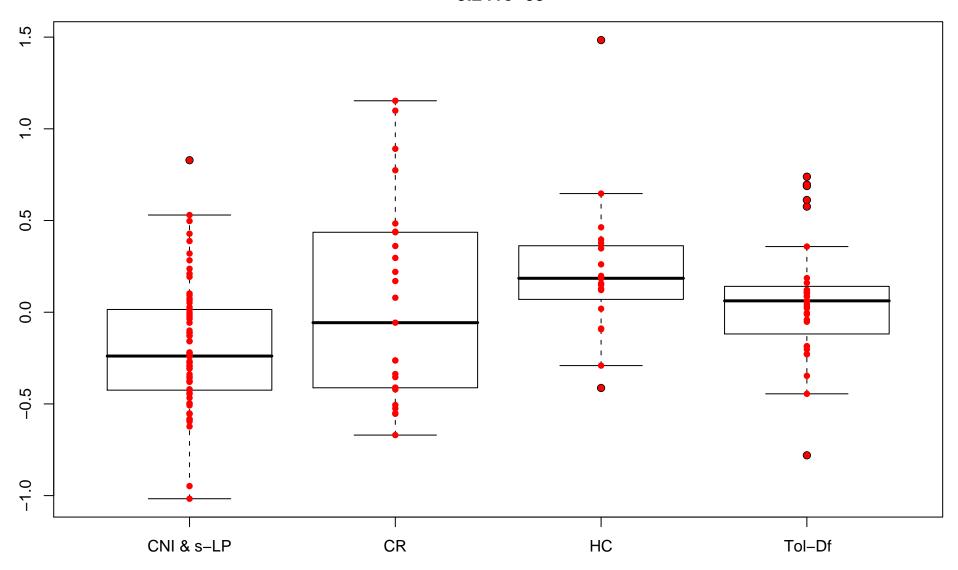
Rank 337 : GALNT4 5.171e-05



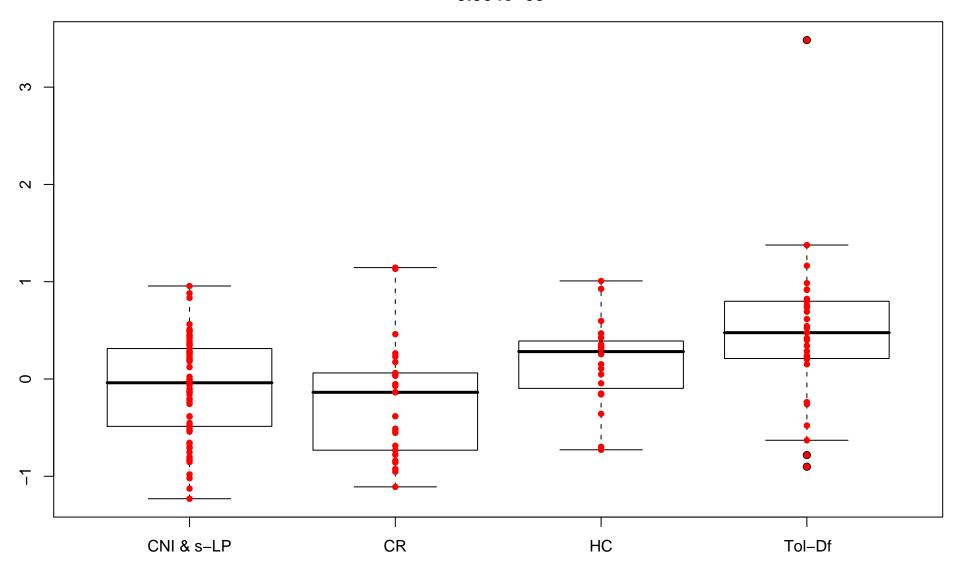
Rank 338 : SATB1 5.219e-05



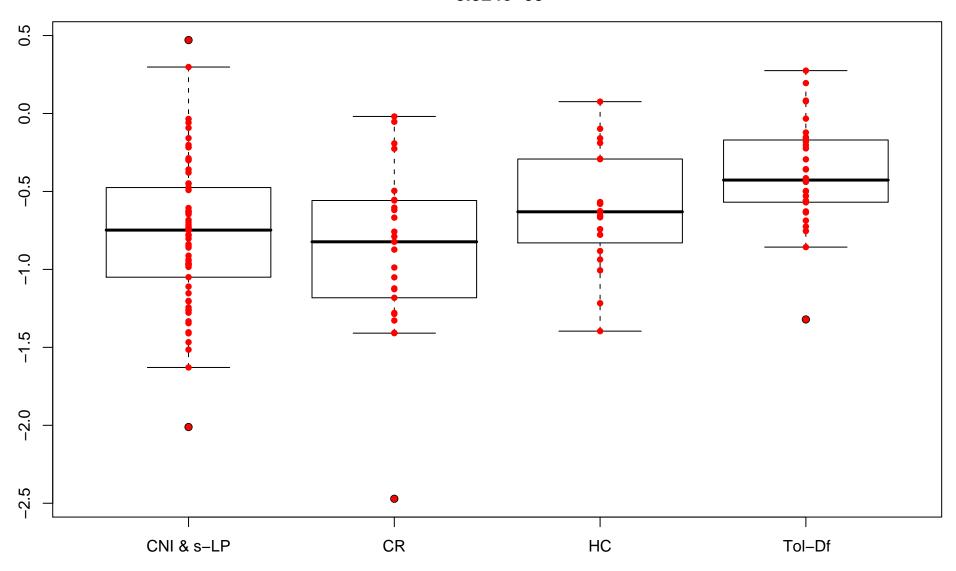
Rank 339 : PRKCE 5.241e-05



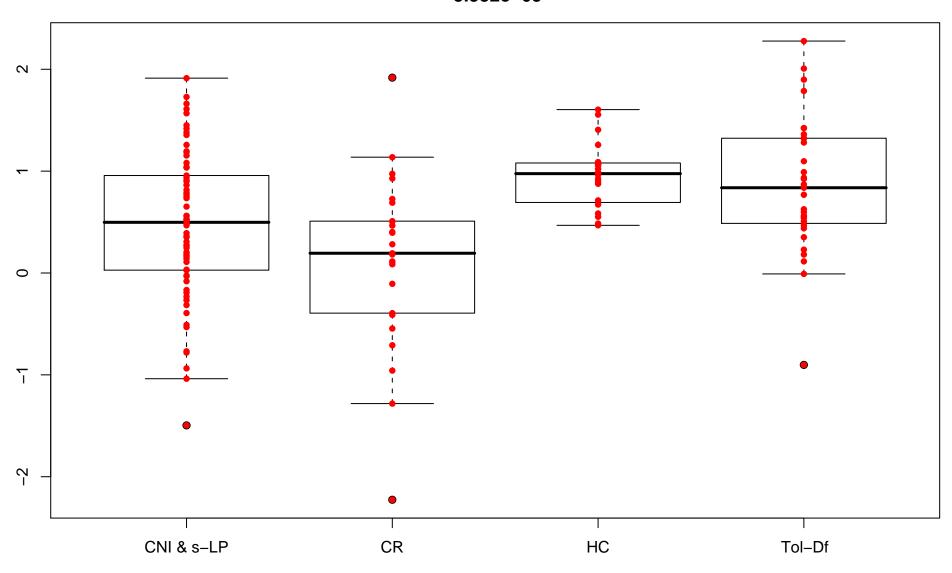
Rank 340 : ZNF17 5.304e-05



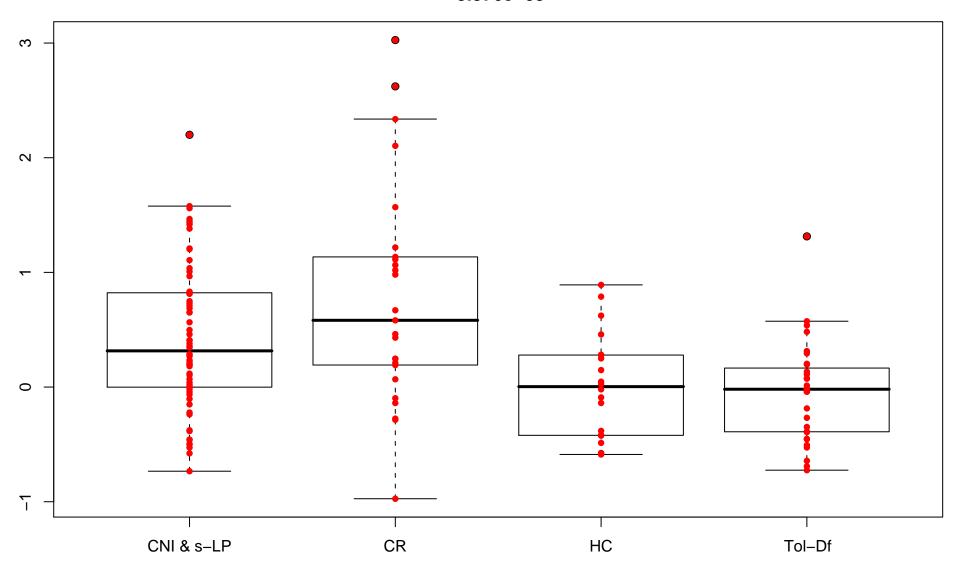
Rank 341 : PRIM1 5.324e-05



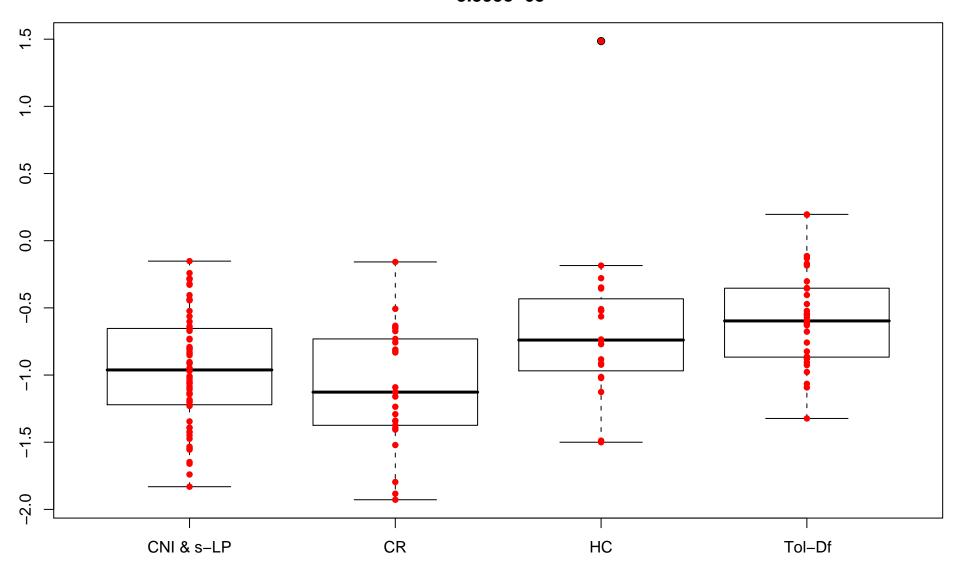
Rank 342 : PRKCH 5.332e-05



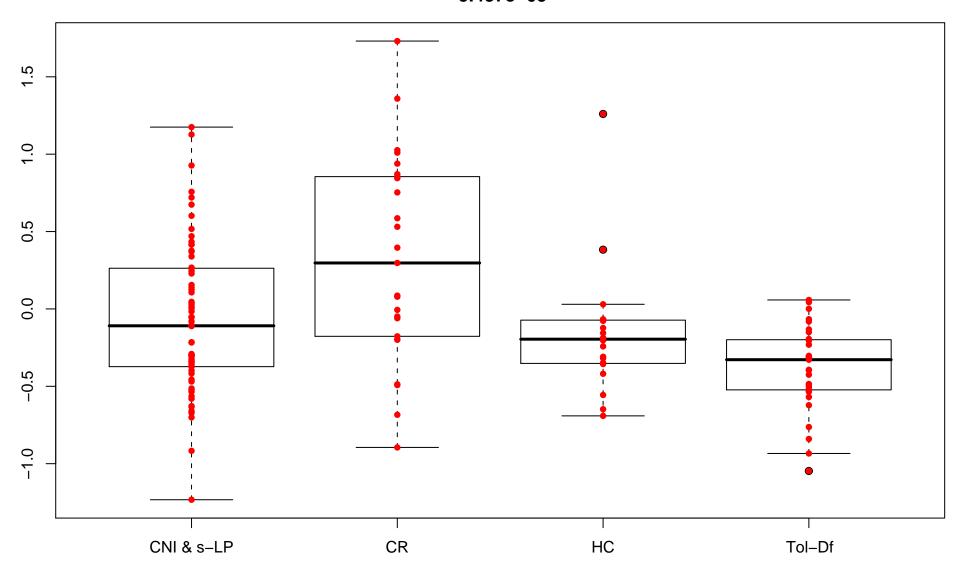
Rank 343 : MAP3K7IP3 5.376e-05



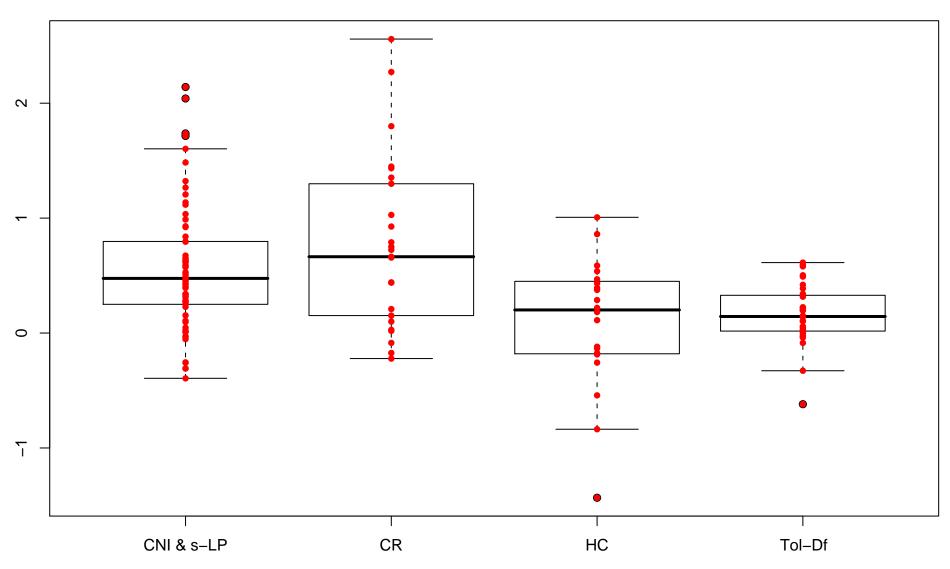
Rank 344 : FAU 5.395e-05



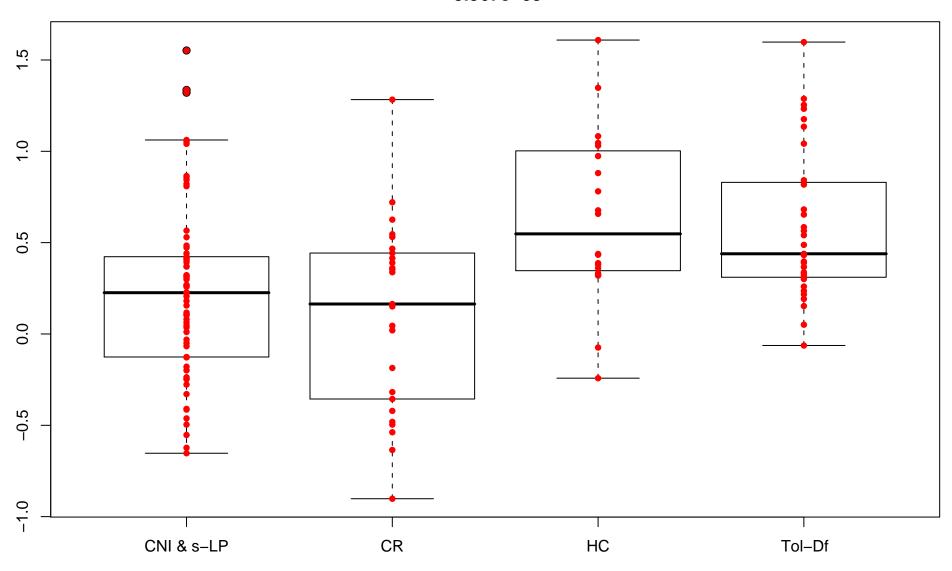
Rank 345 : FLT3 5.437e-05



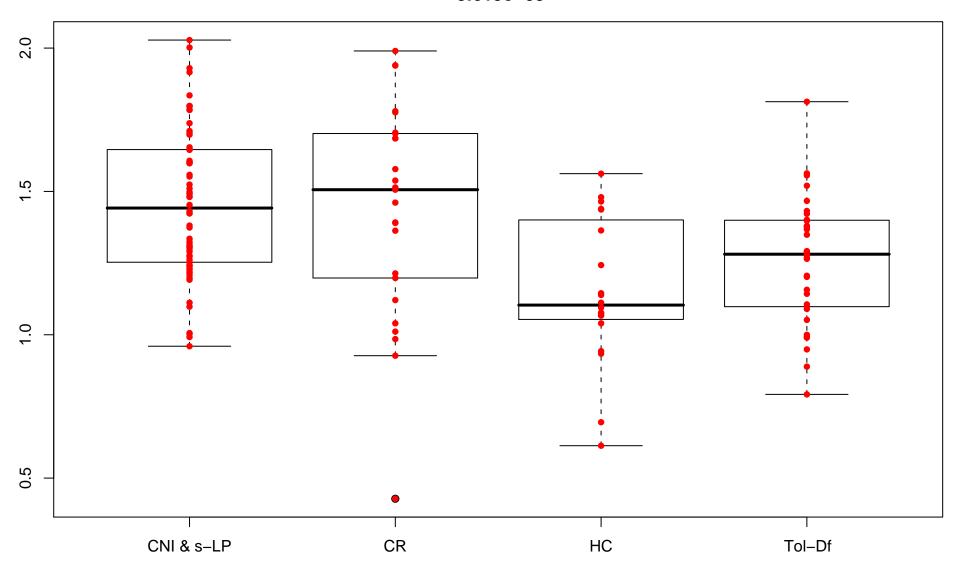
Rank 346 : PLCL2 5.534e-05



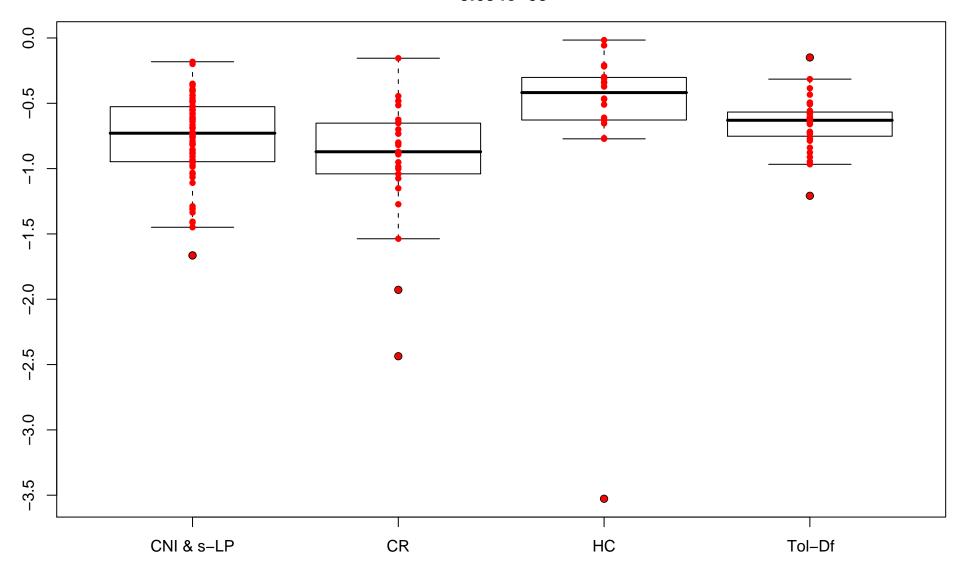
Rank 347 : HSPD1 5.567e-05



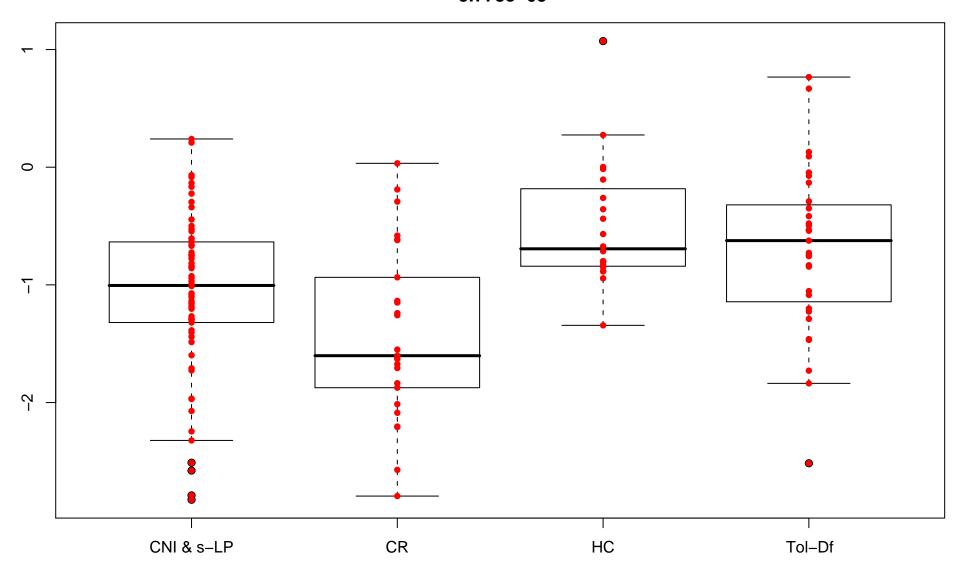
Rank 348 : ACTN4 5.619e-05



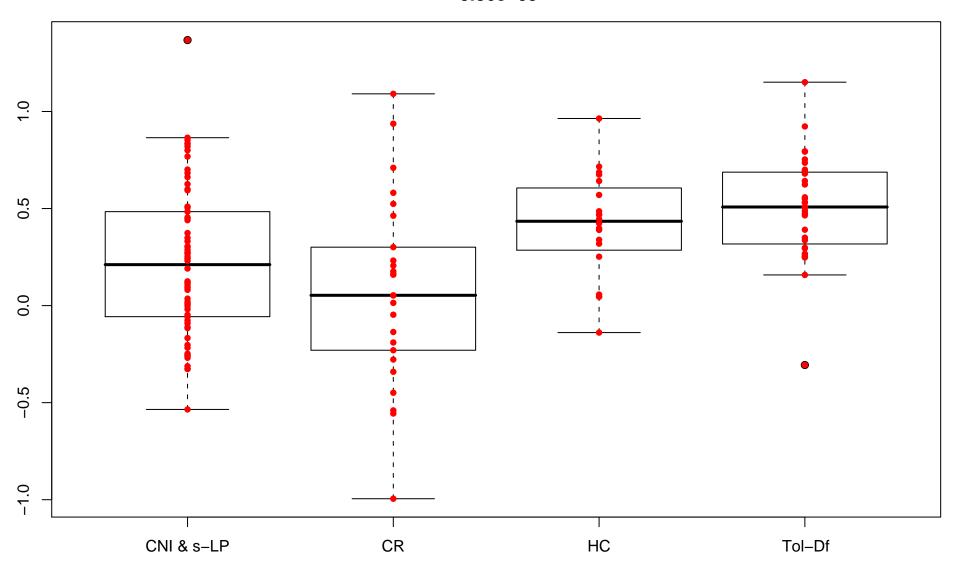
Rank 349 : TXNDC9 5.694e-05



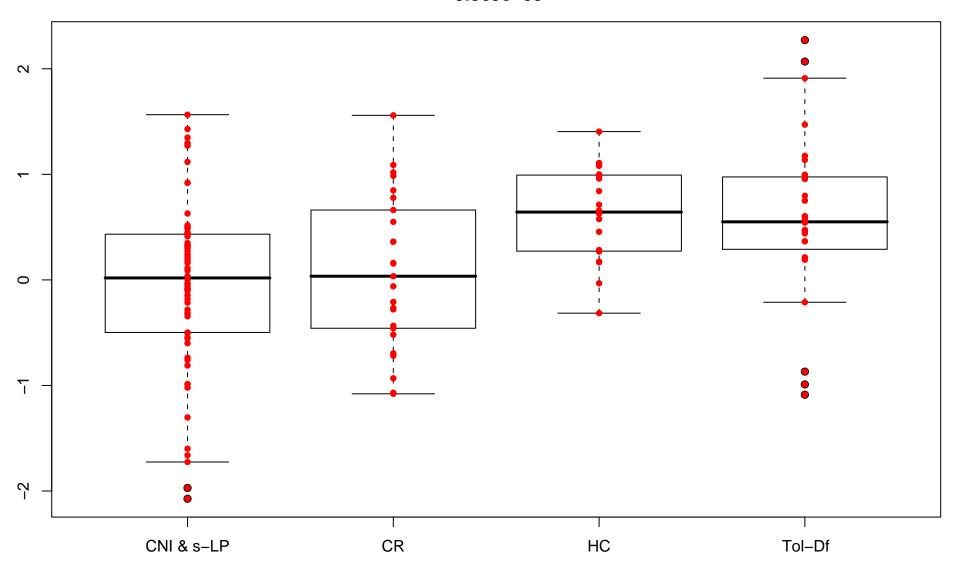
Rank 350 : THC2432515 5.778e-05



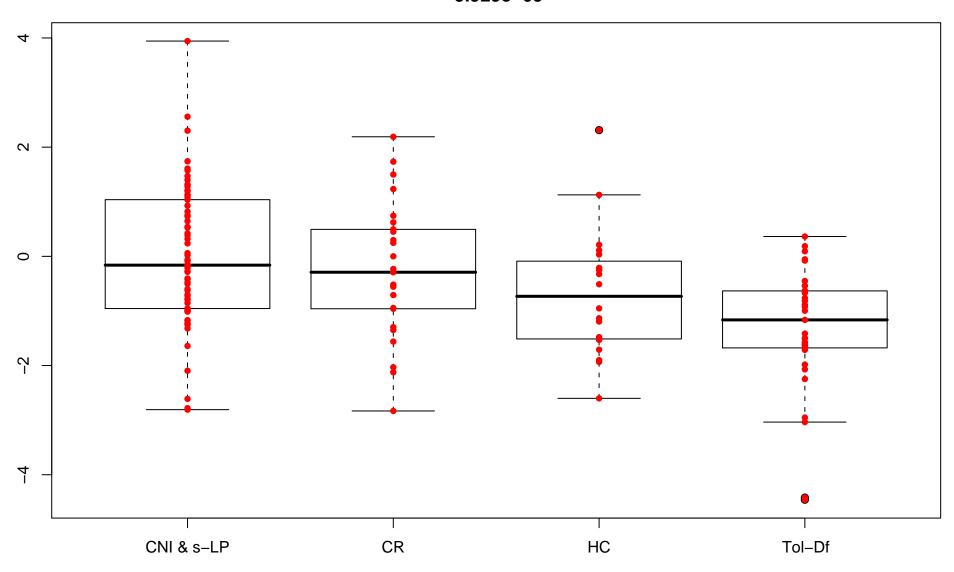
Rank 351 : ZWILCH 5.86e-05



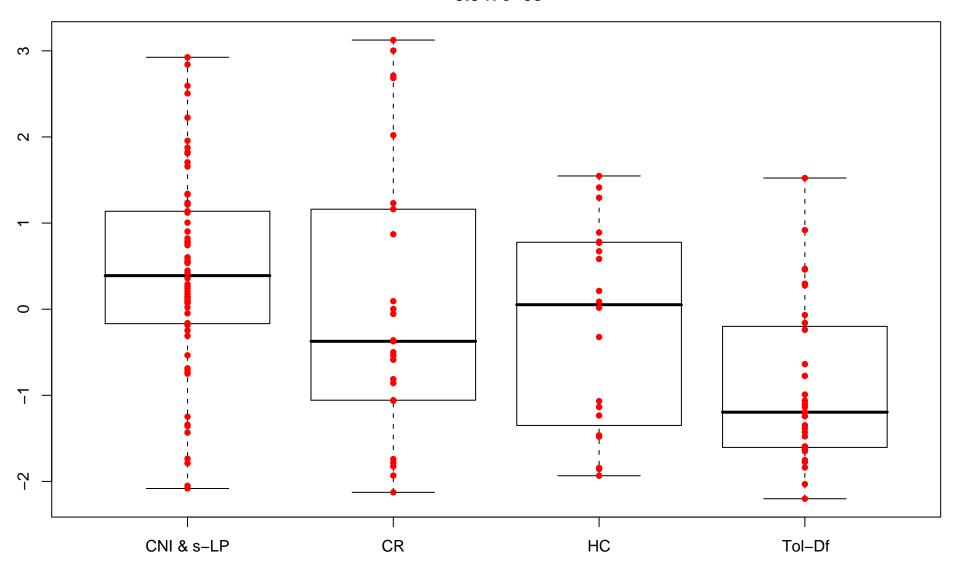
Rank 352 : SH2D1B 5.869e-05



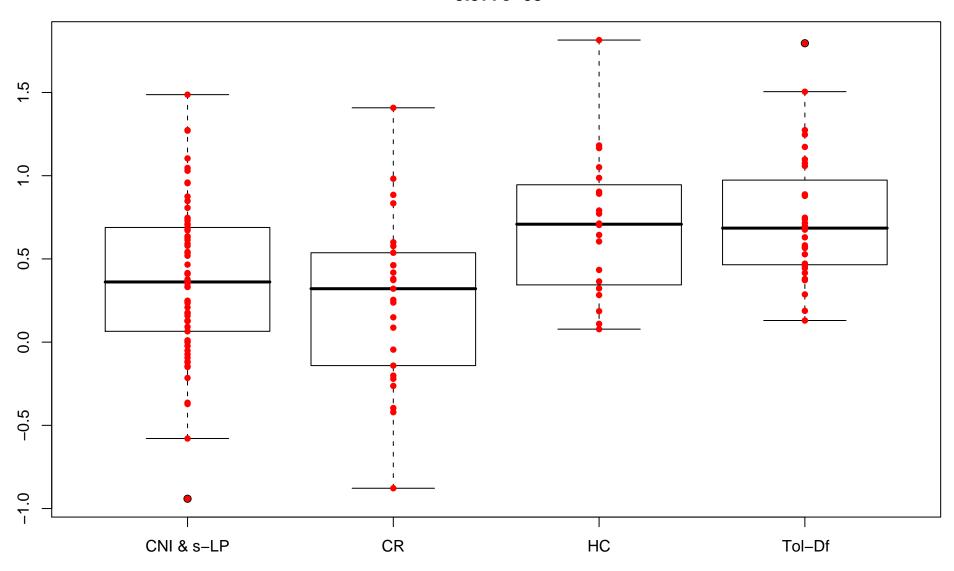
Rank 353 : CAMP 5.929e-05



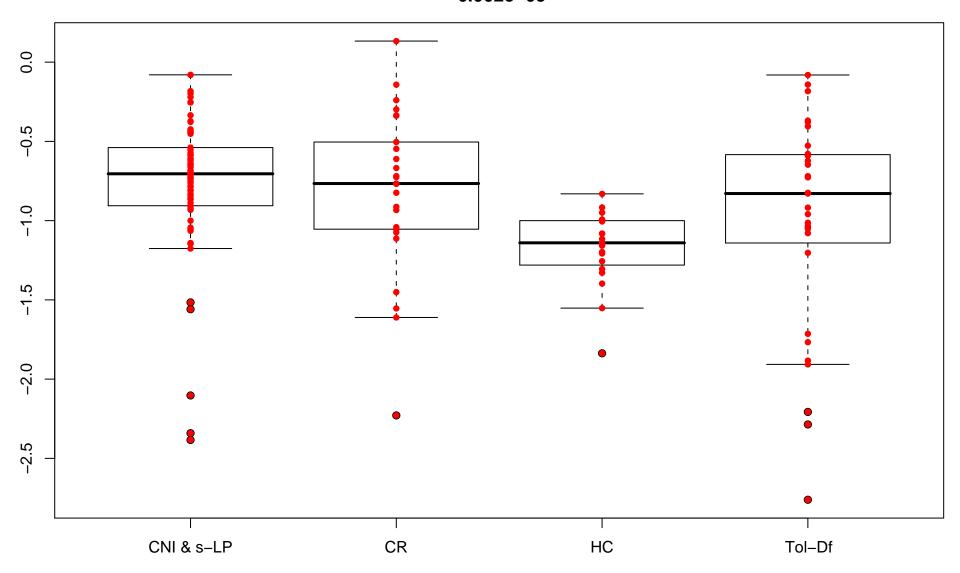
Rank 354 : TUBB;TUBB2A 5.947e-05



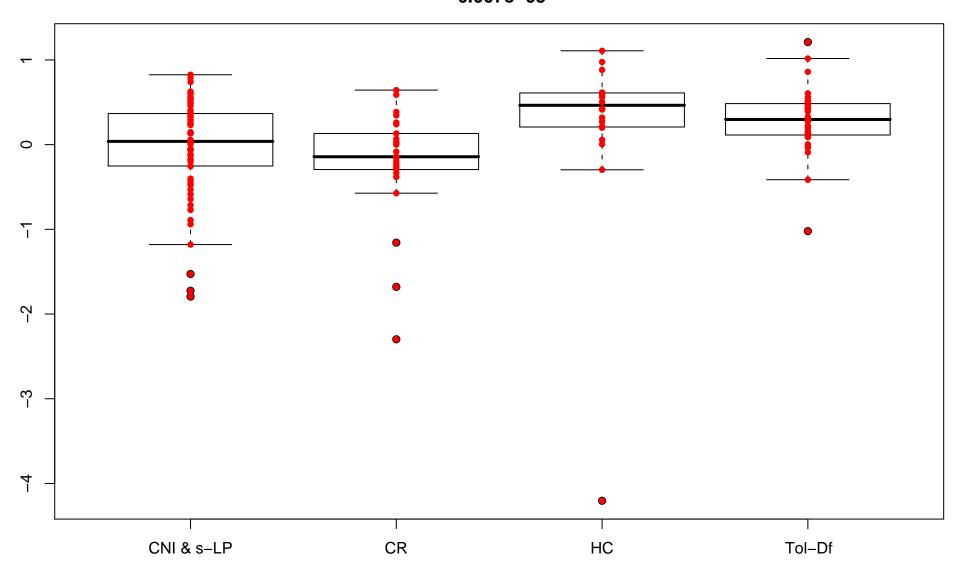
Rank 355 : AKAP1 5.977e-05



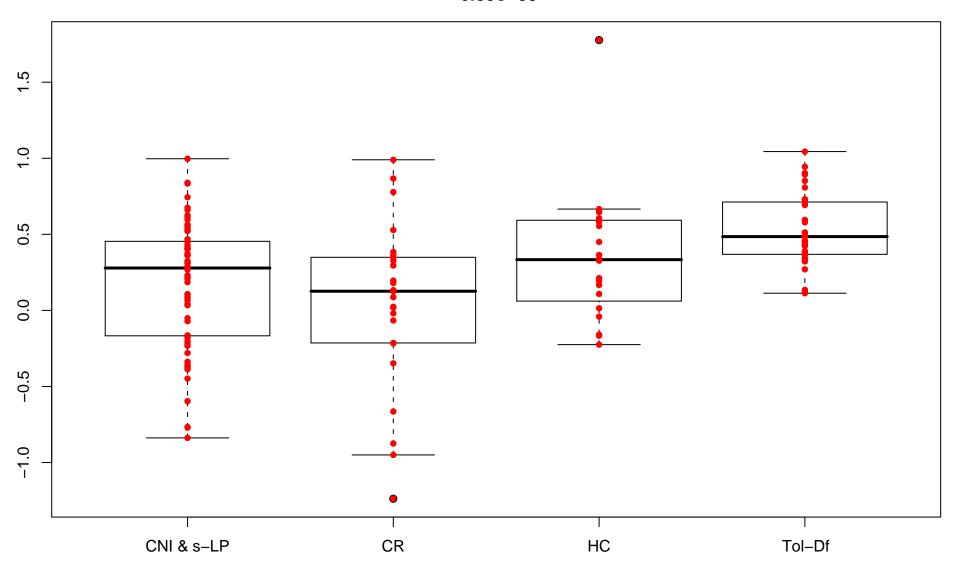
Rank 356 : DTNBP1 6.002e-05



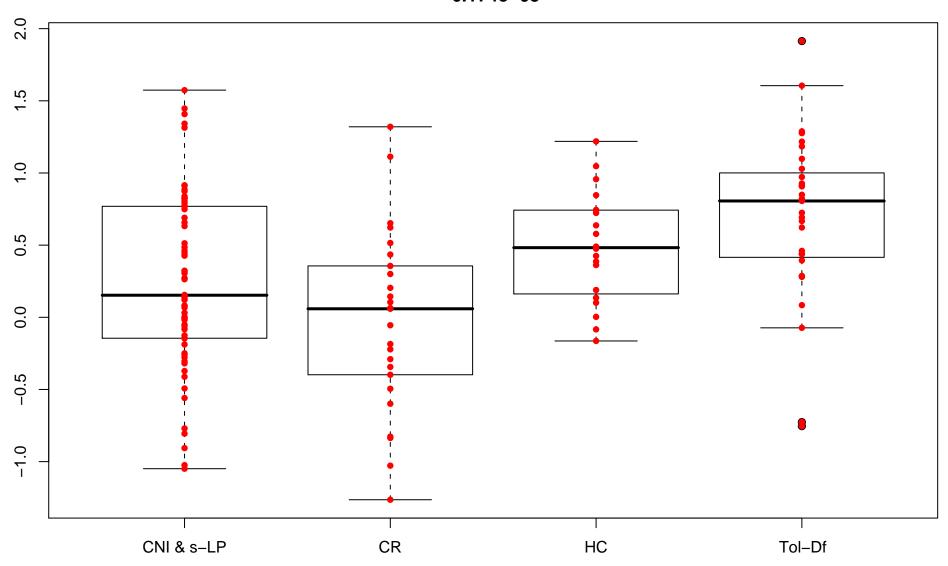
Rank 357 : ADD3 6.007e-05



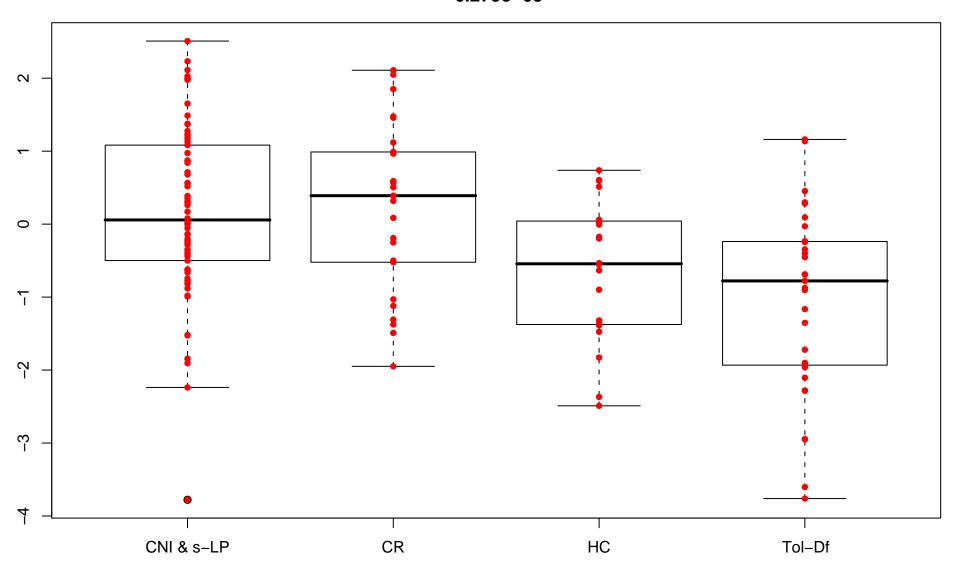
Rank 358 : ZNF573 6.09e-05



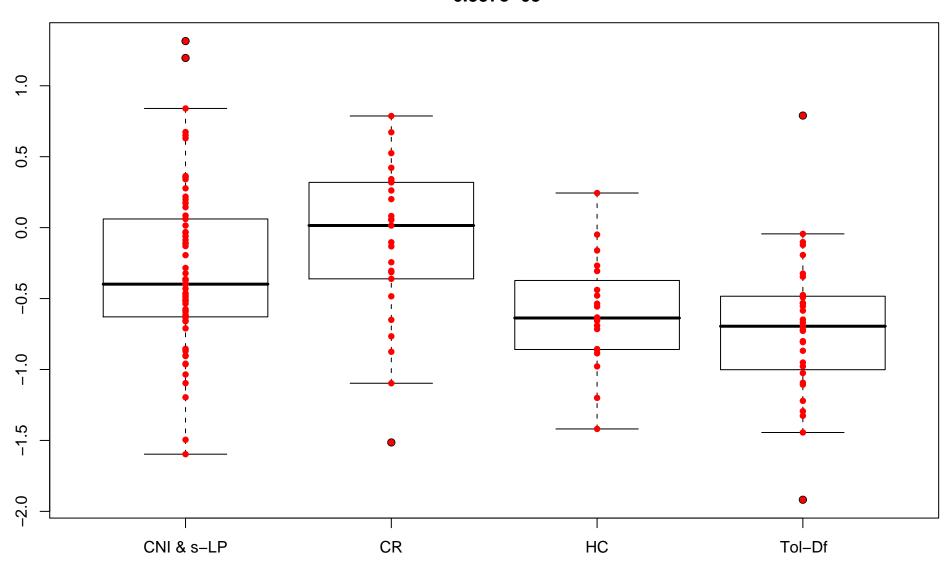
Rank 359 : CHST2 6.174e-05



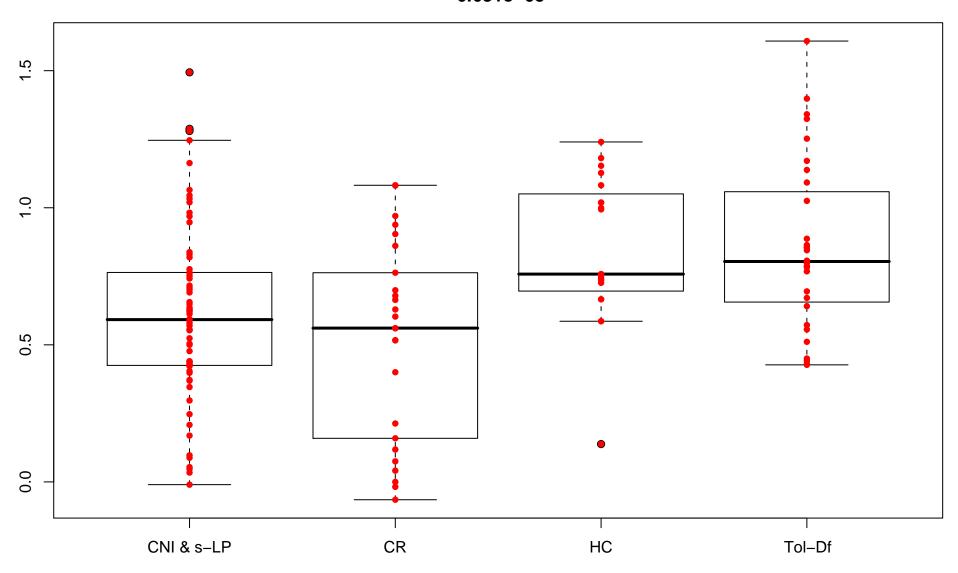
Rank 360 : ARG1 6.279e-05



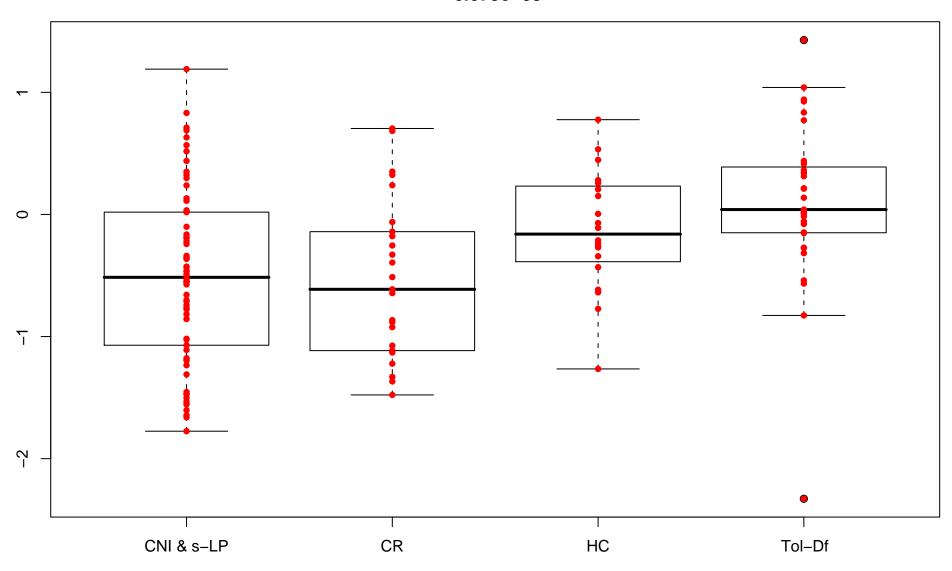
Rank 361 : SSFA2 6.557e-05



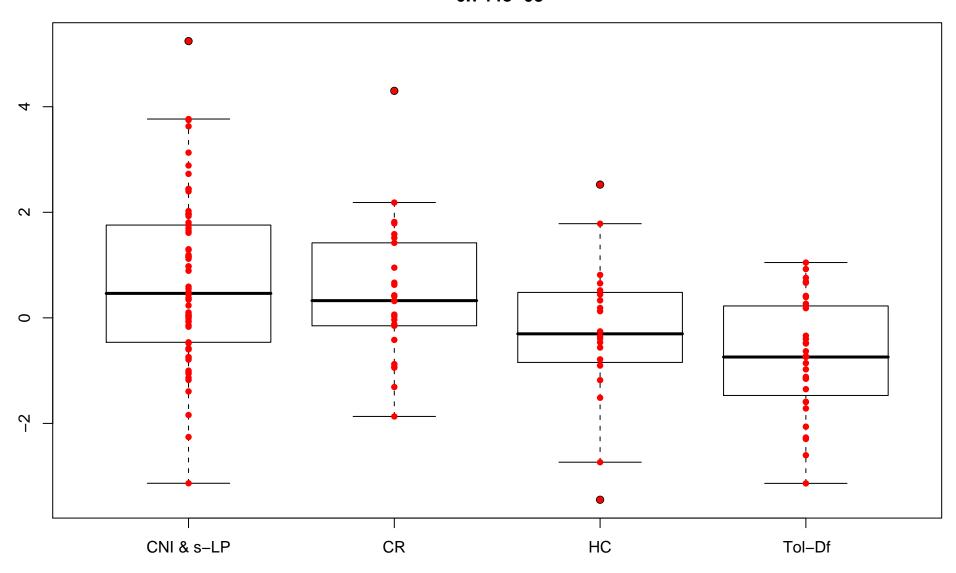
Rank 362 : DHX9 6.631e-05



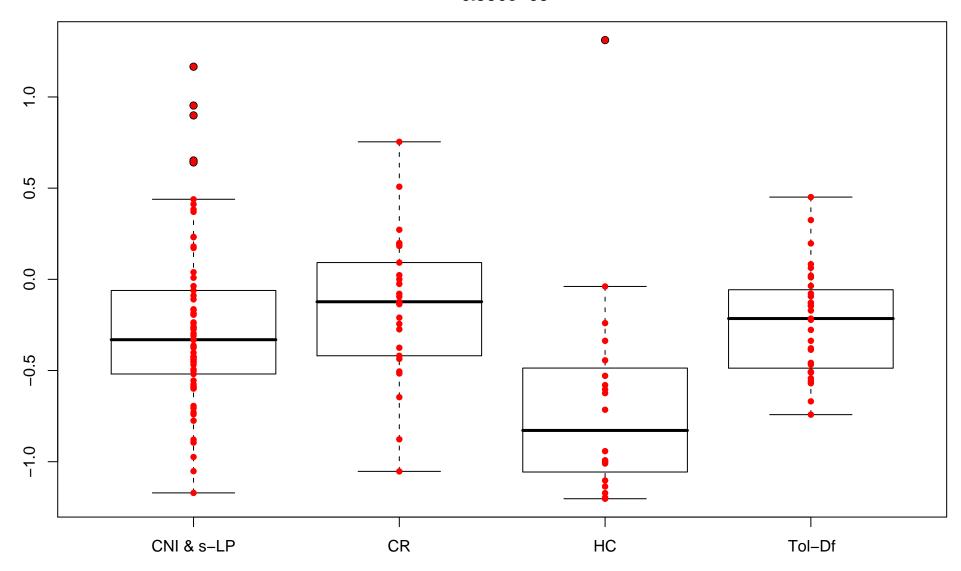
Rank 363 : UBE2CBP 6.673e-05



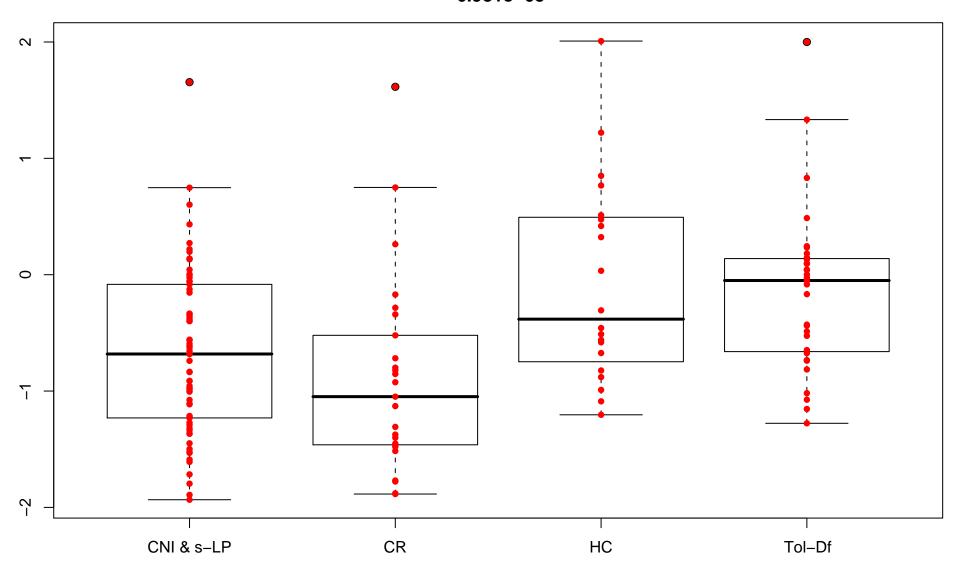
Rank 364 : DEFA4 6.744e-05



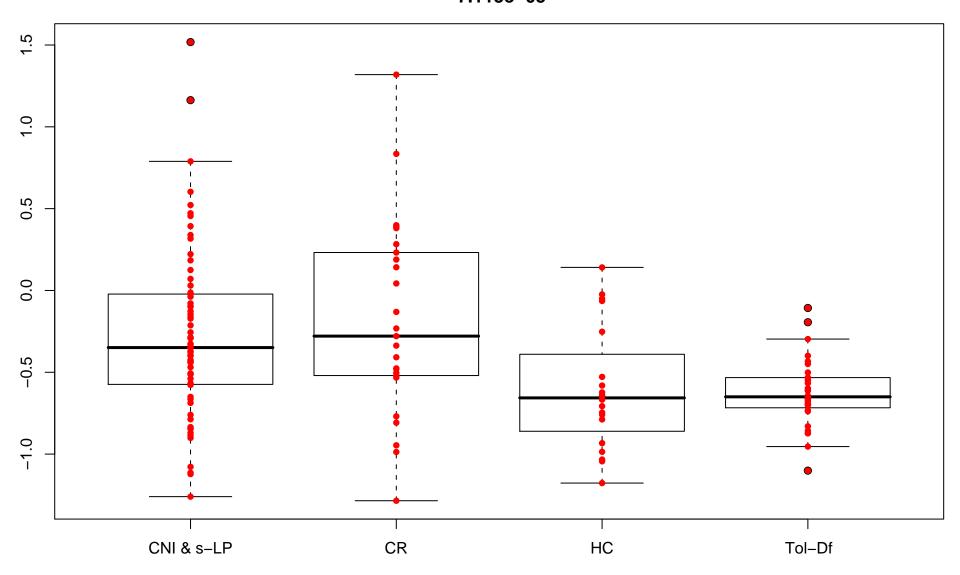
Rank 365 : HLA-DRA 6.956e-05



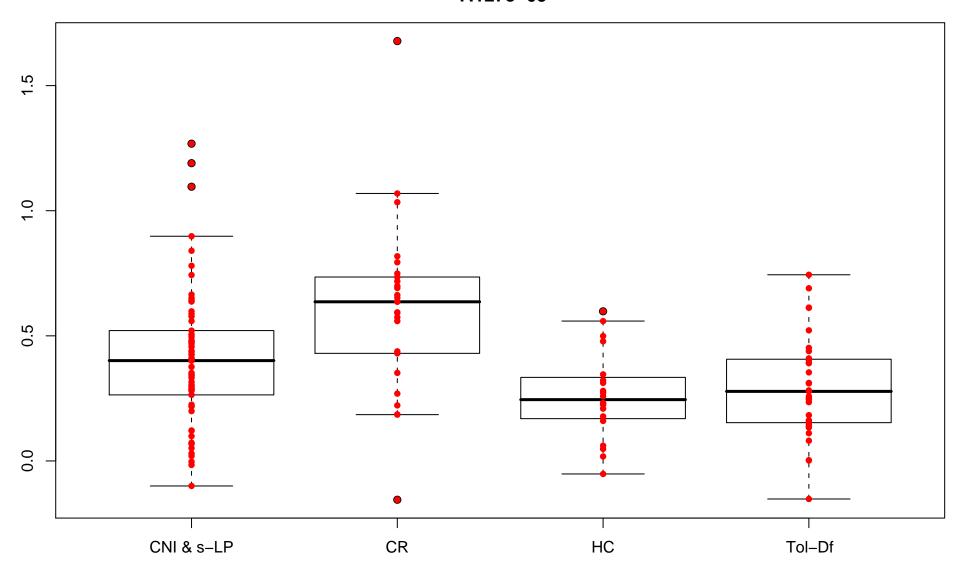
Rank 366 : DNTT 6.981e-05



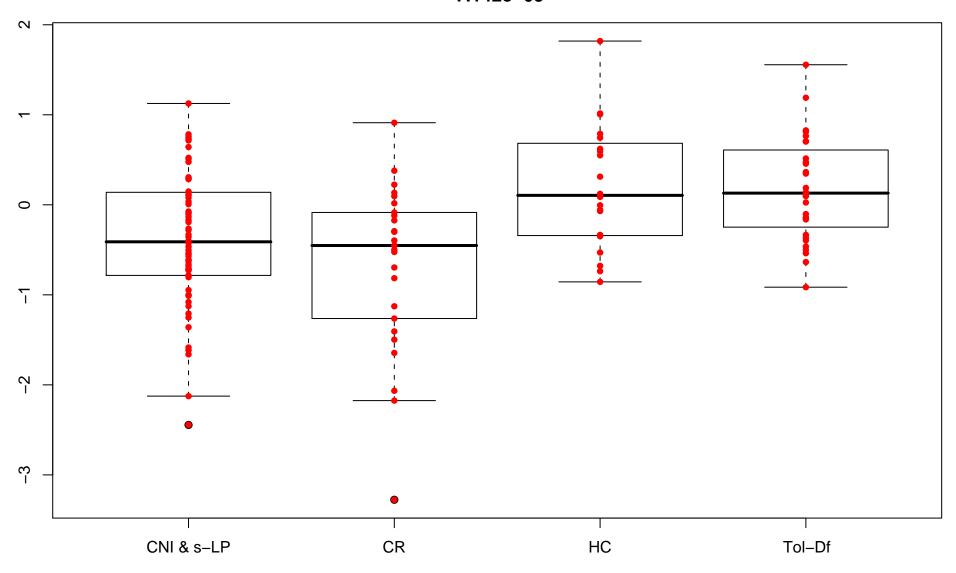
Rank 367 : ZDHHC3 7.113e-05



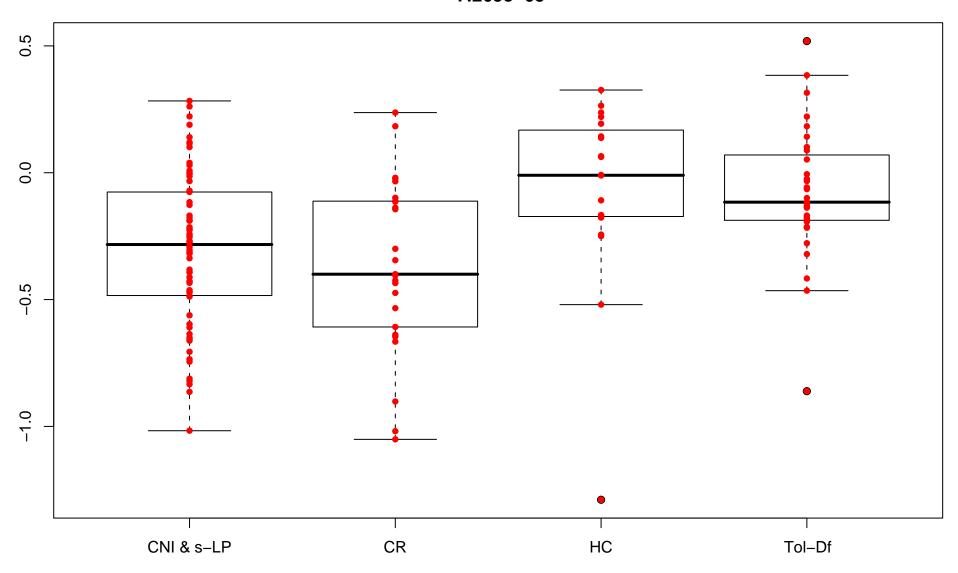
Rank 368 : RHBDD1 7.127e-05



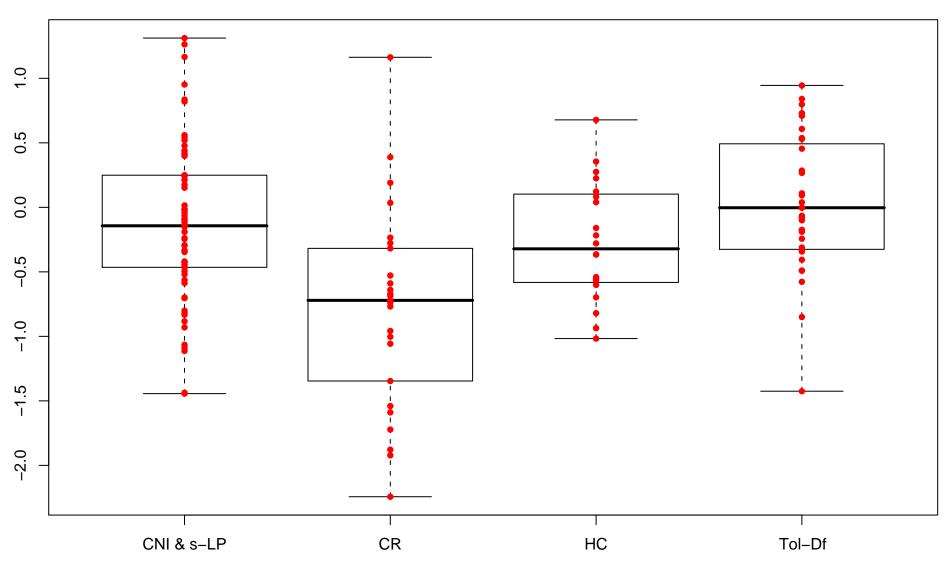
Rank 369 : IL7R 7.142e-05



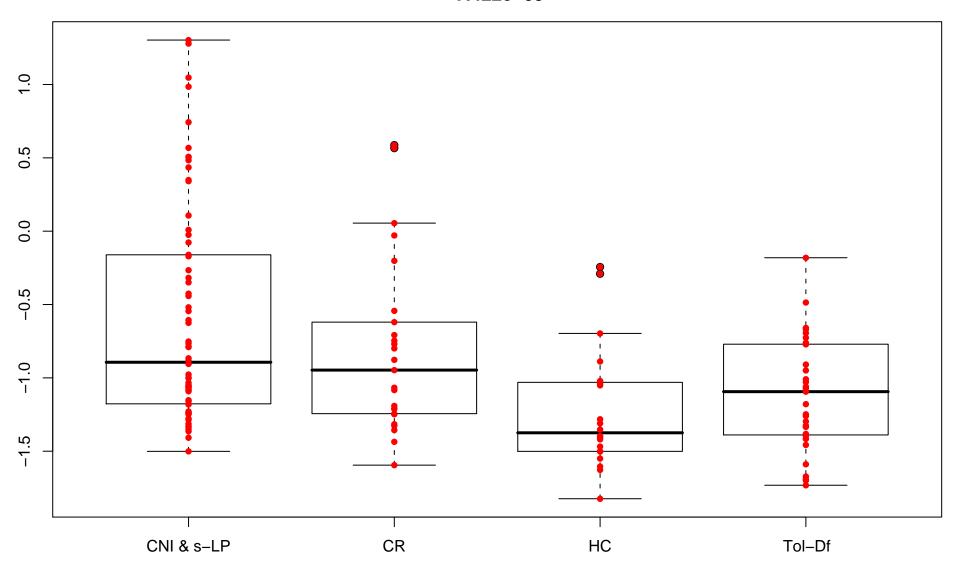
Rank 370 : SFT2D3 7.265e-05



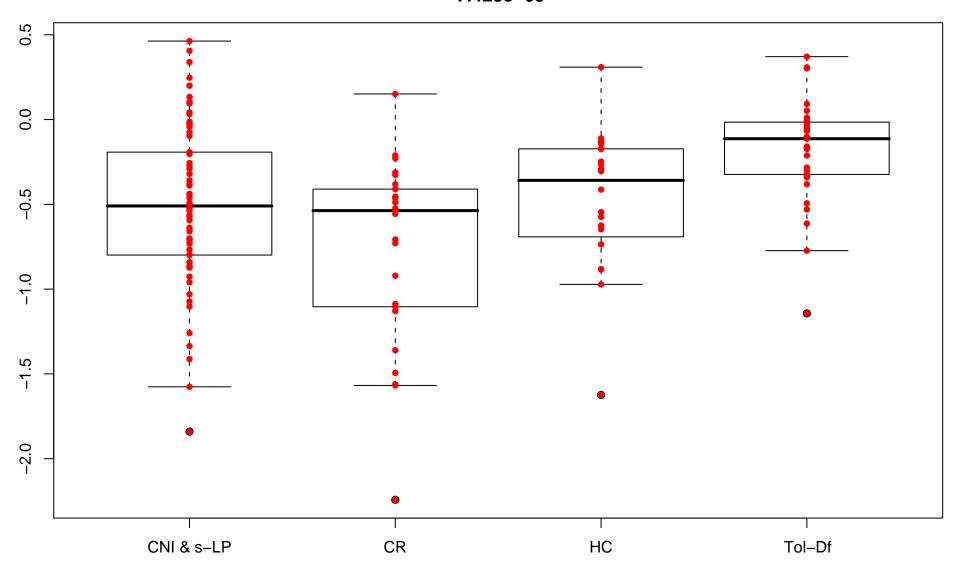
Rank 371 : KLRG1 7.338e-05



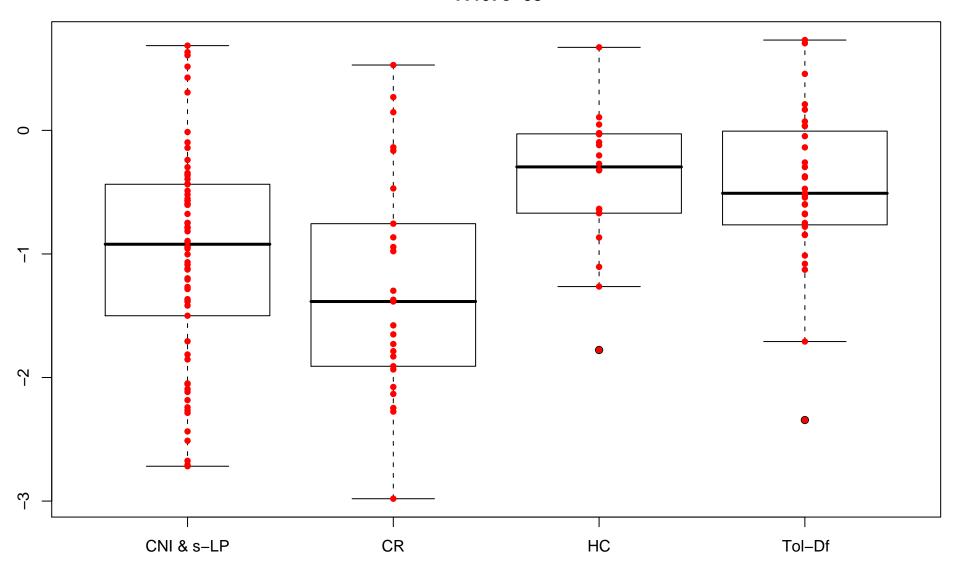
Rank 372 : MSR1 7.422e-05



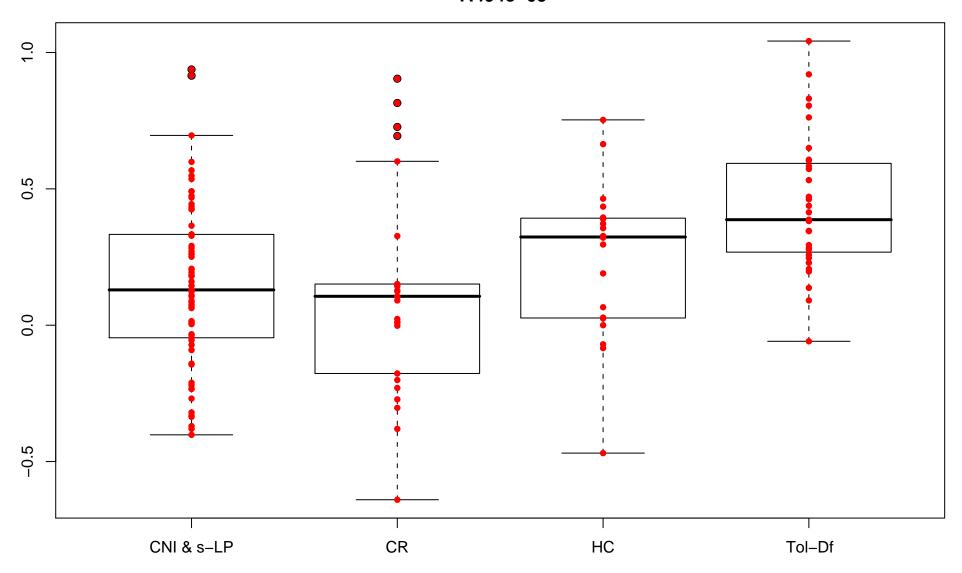
Rank 373 : ABI2 7.428e-05



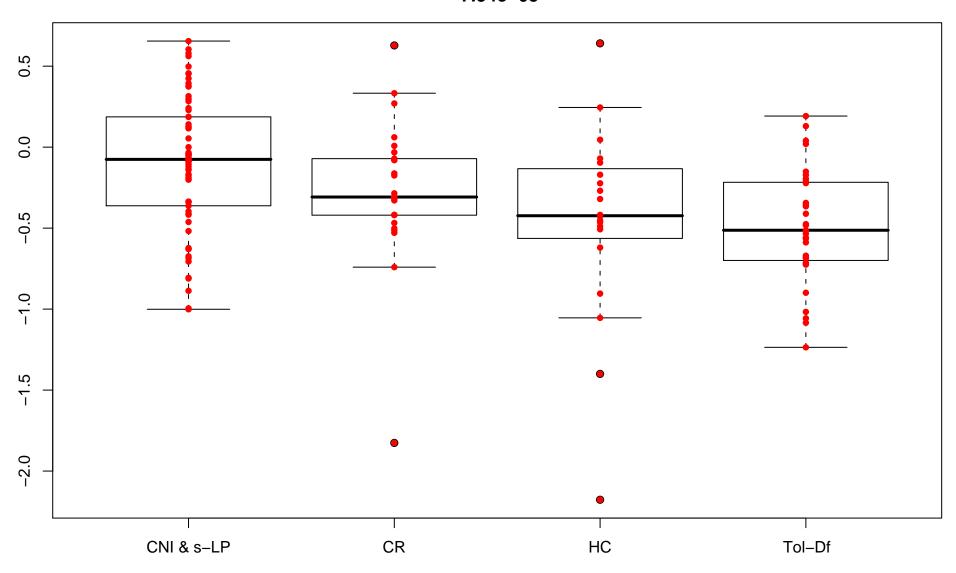
Rank 374 : NDFIP2 7.467e-05



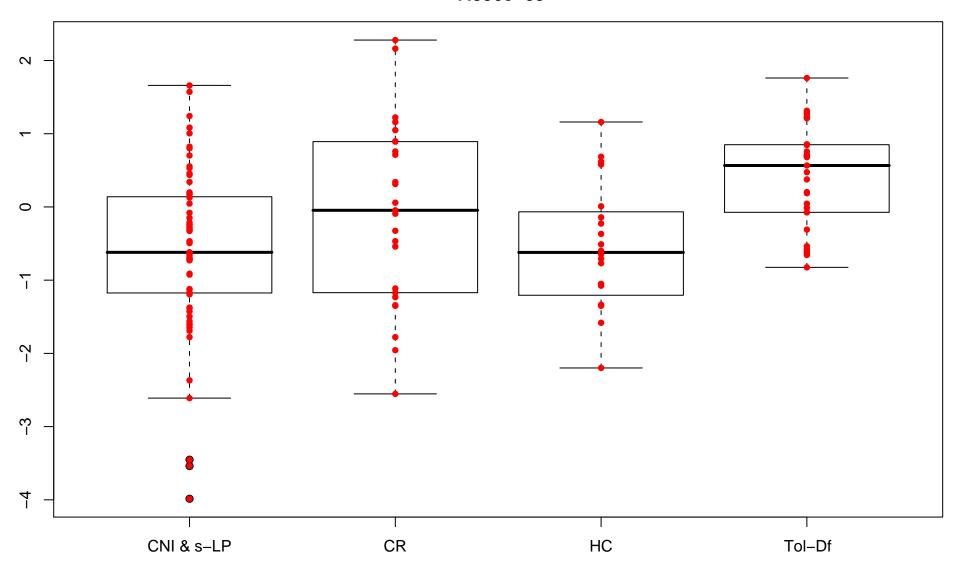
Rank 375 : IFT80 7.494e-05



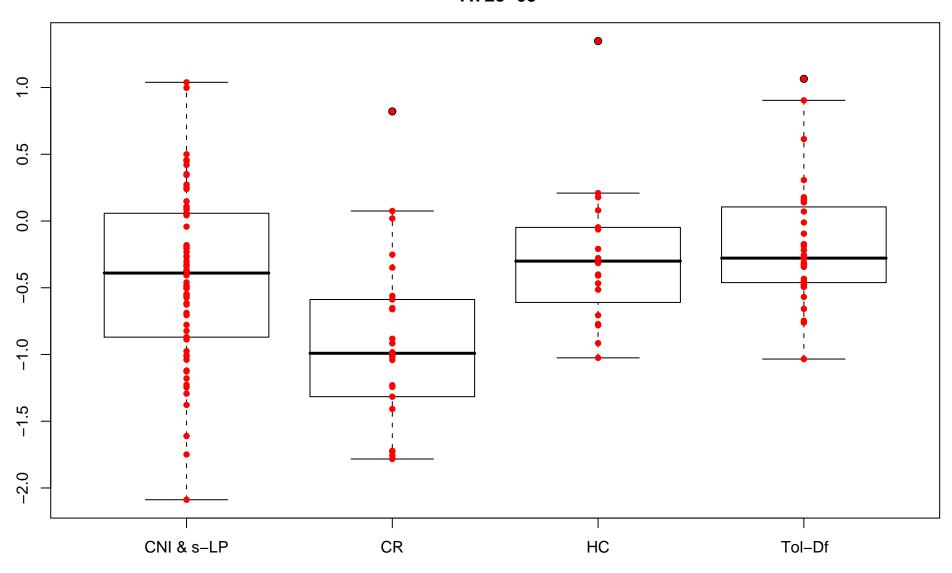
Rank 376 : BST1 7.54e-05



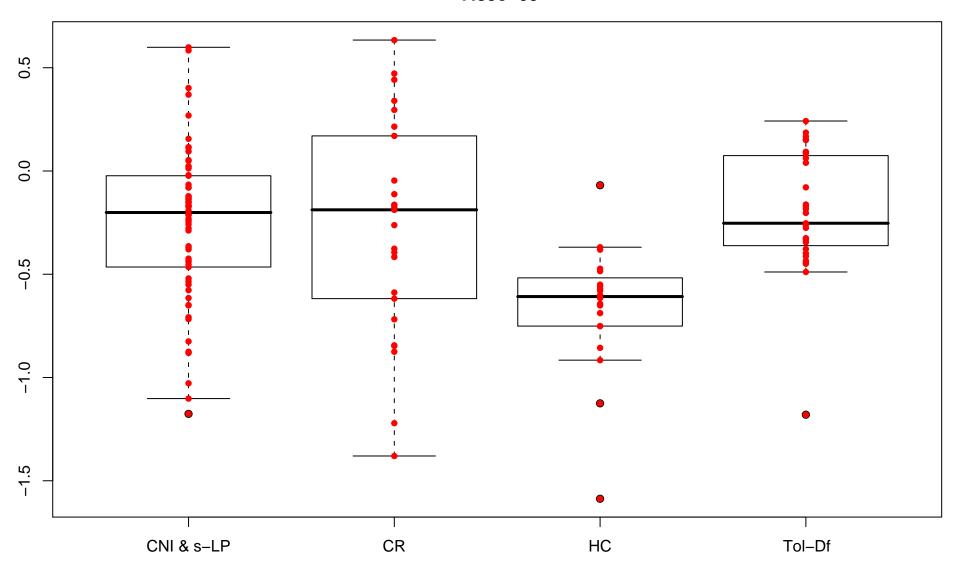
Rank 377 : HLA-DQA2 7.556e-05



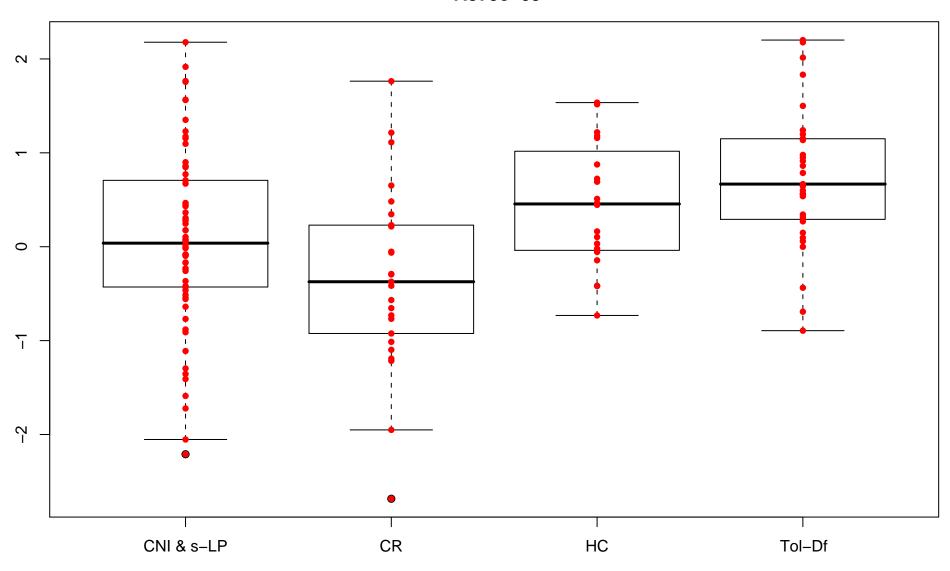
Rank 378: VSTM3 7.72e-05



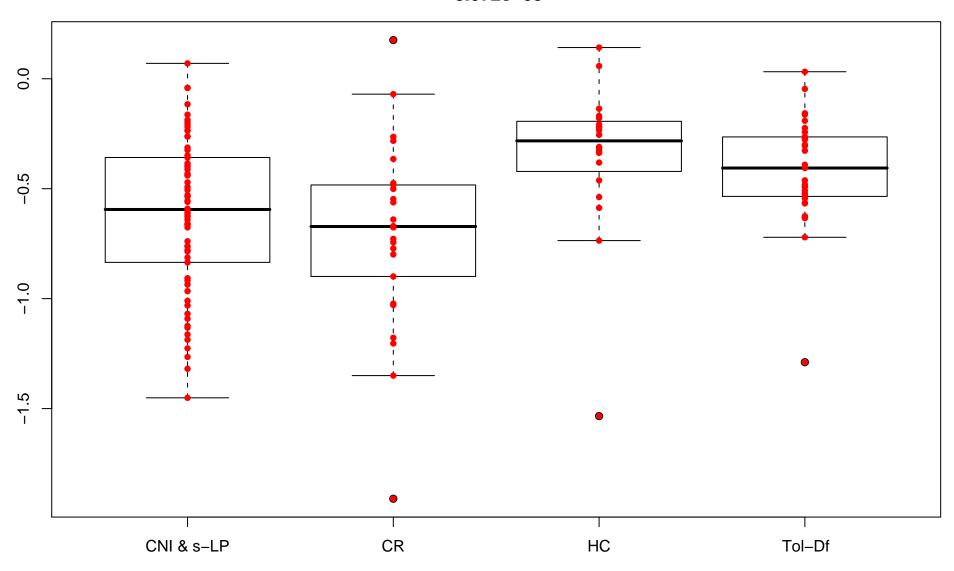
Rank 379 : CCDC123 7.85e-05



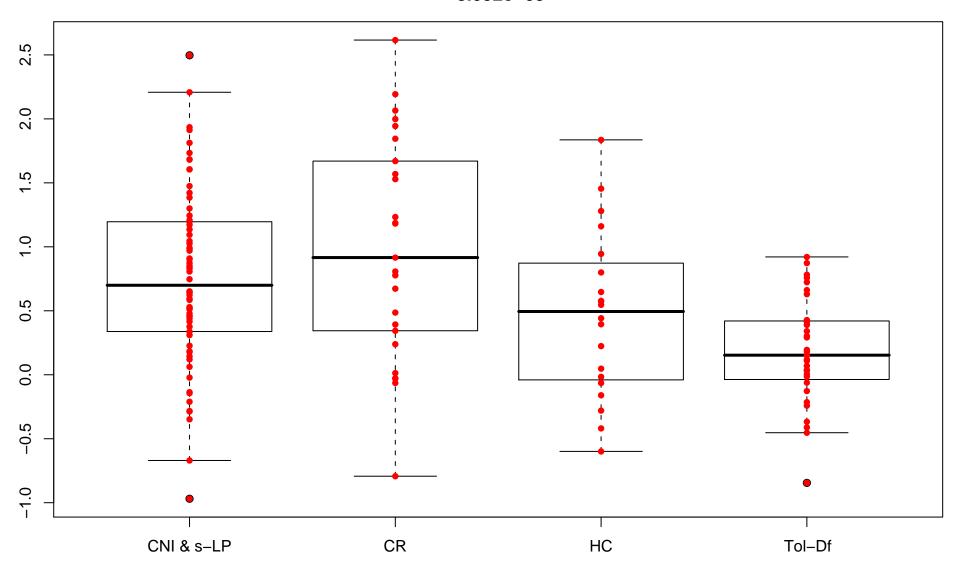
Rank 380 : AMIGO1 7.979e-05



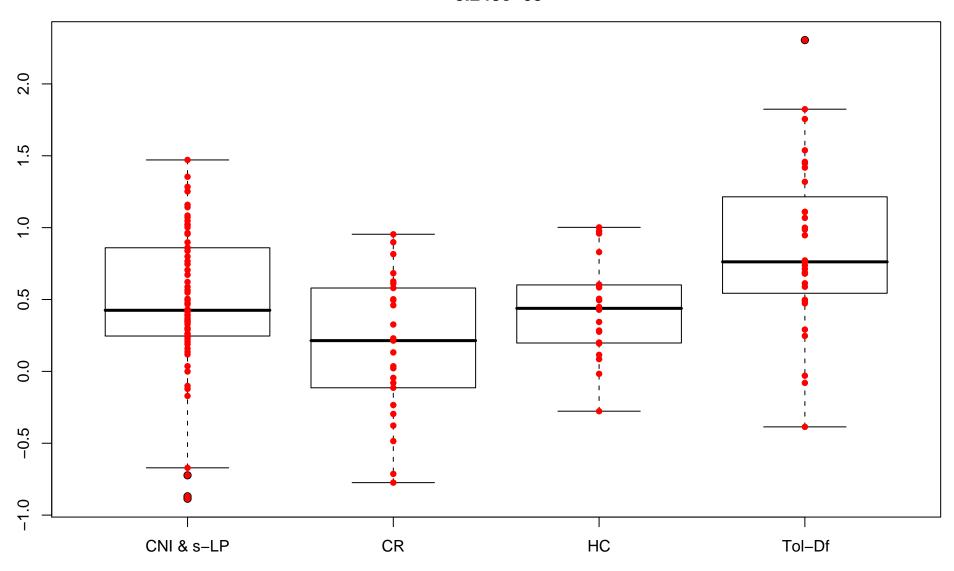
Rank 381 : NDUFB5 8.072e-05



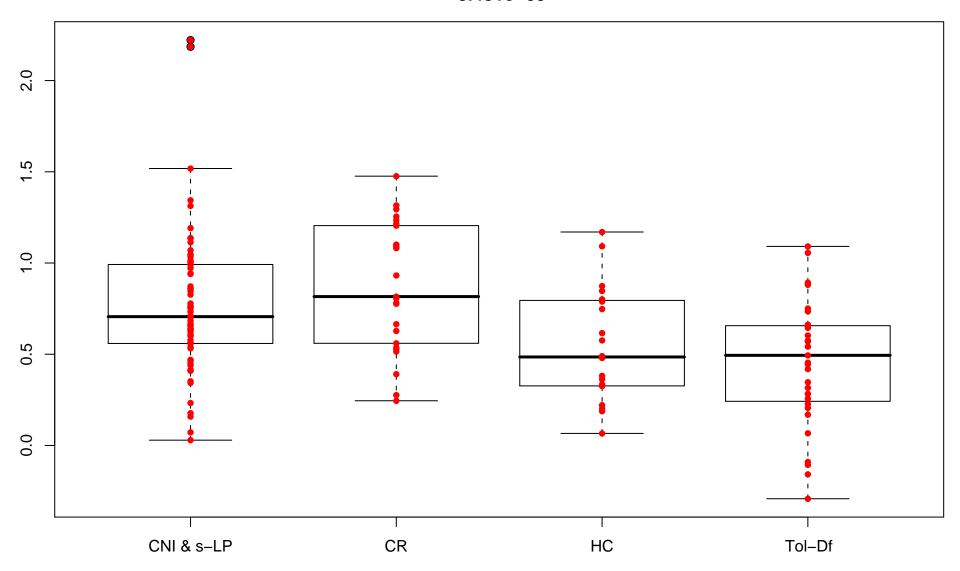
Rank 382 : PIP4K2A 8.092e-05



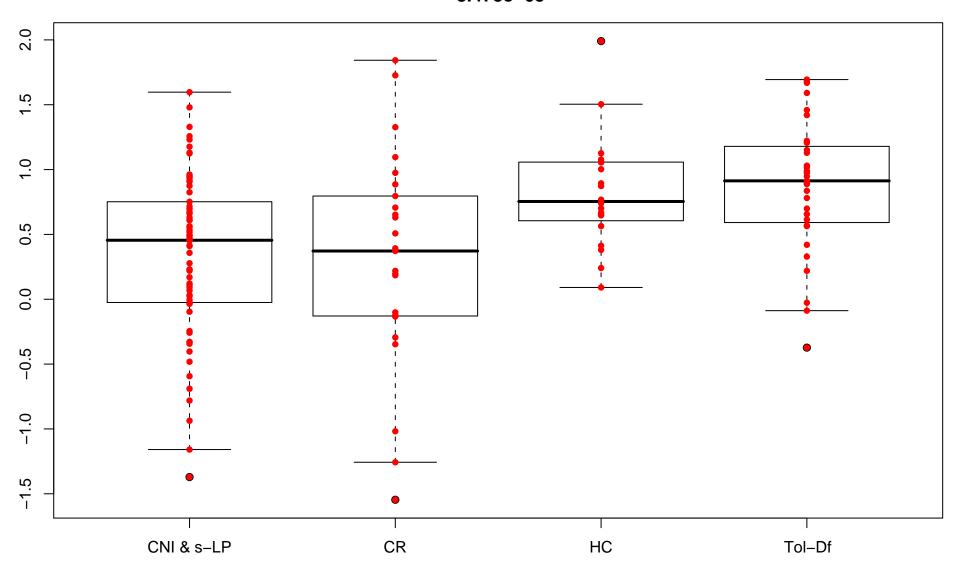
Rank 383 : BZRAP1 8.248e-05



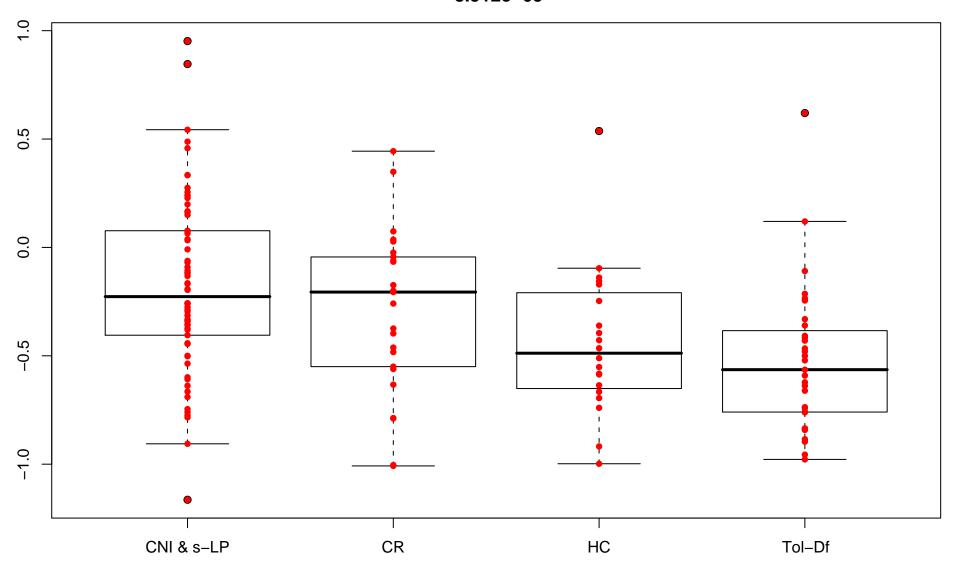
Rank 384 : FURIN 8.431e-05



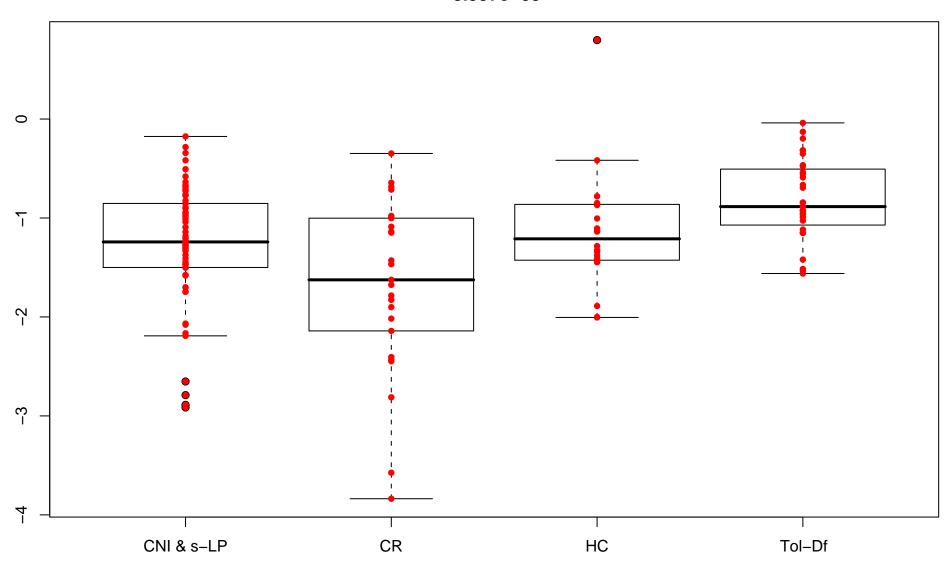
Rank 385 : GNG7 8.478e-05



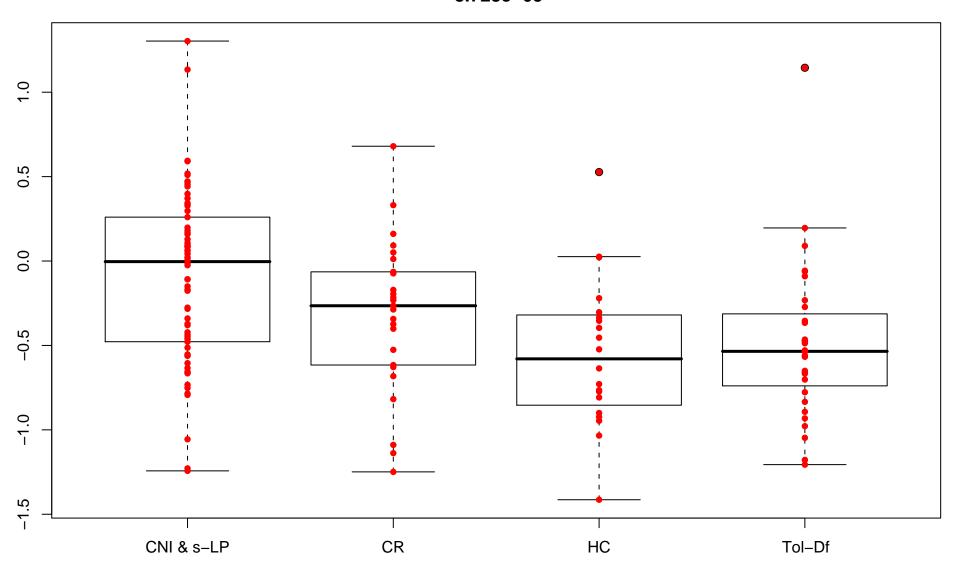
Rank 386 : DOK3 8.512e-05



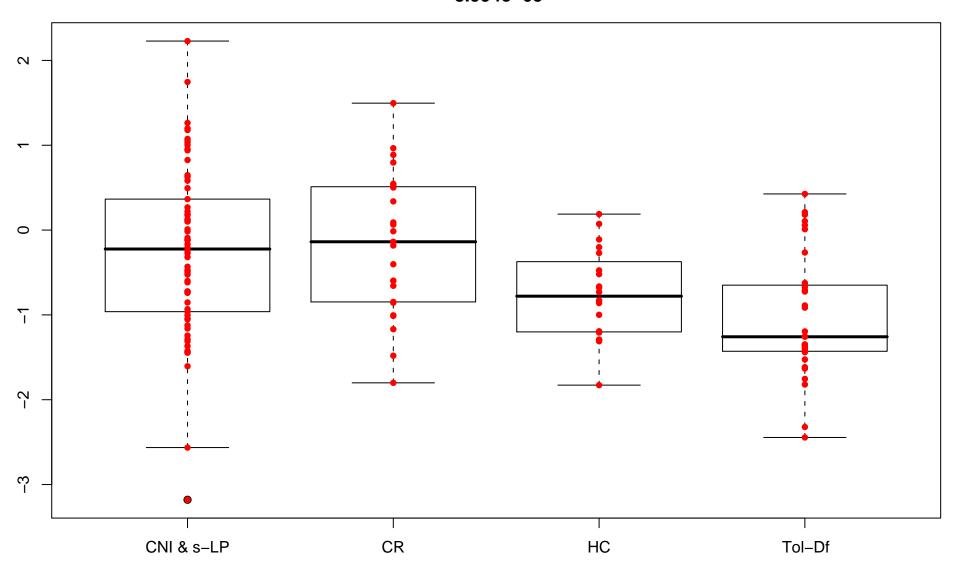
Rank 387 : KIAA0888 8.597e-05



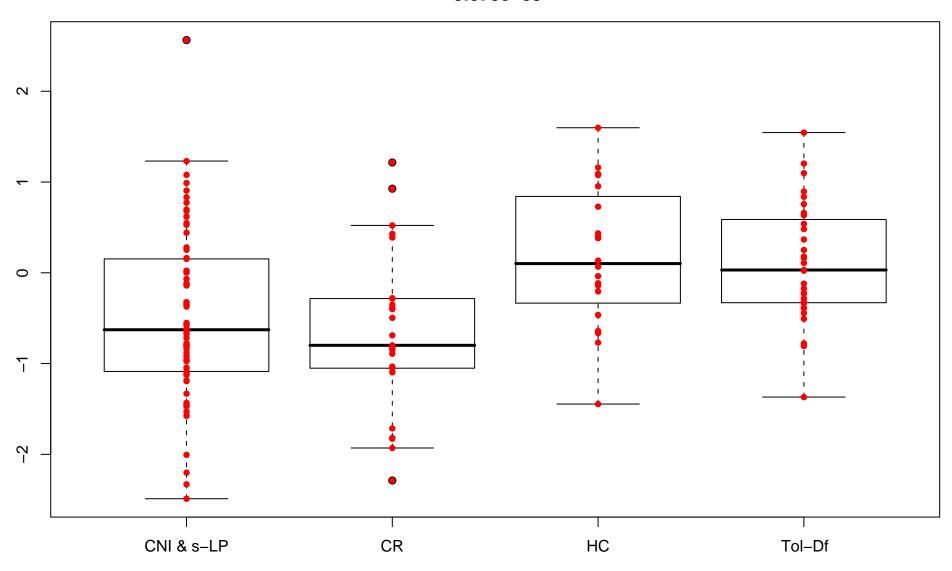
Rank 388 : DHRS12 8.728e-05



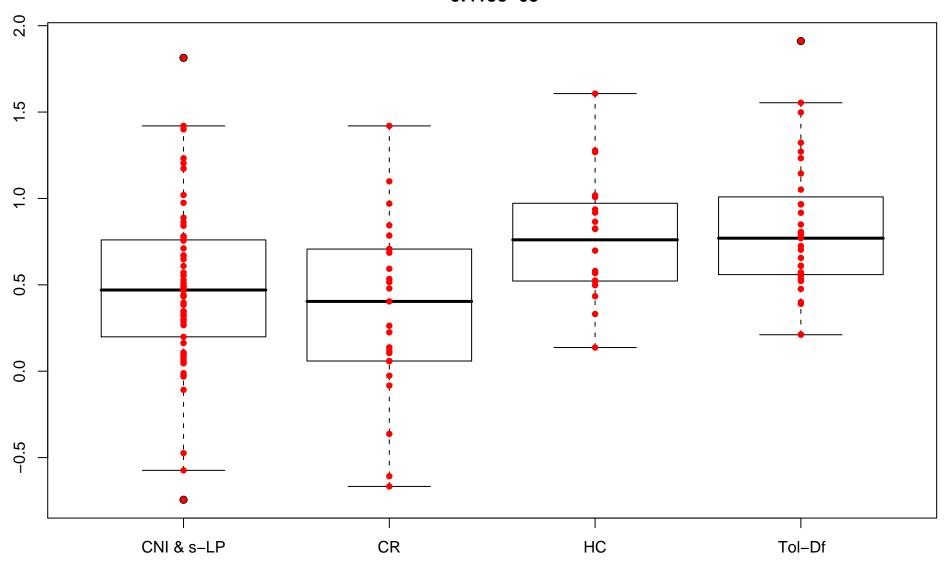
Rank 389 : SLPI 8.994e-05



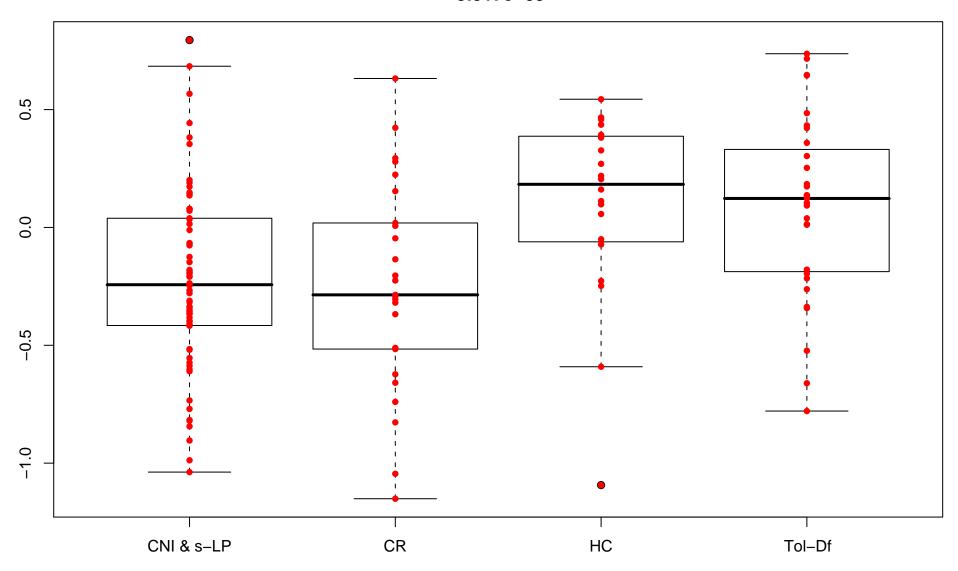
Rank 390 : GLDC 9.078e-05



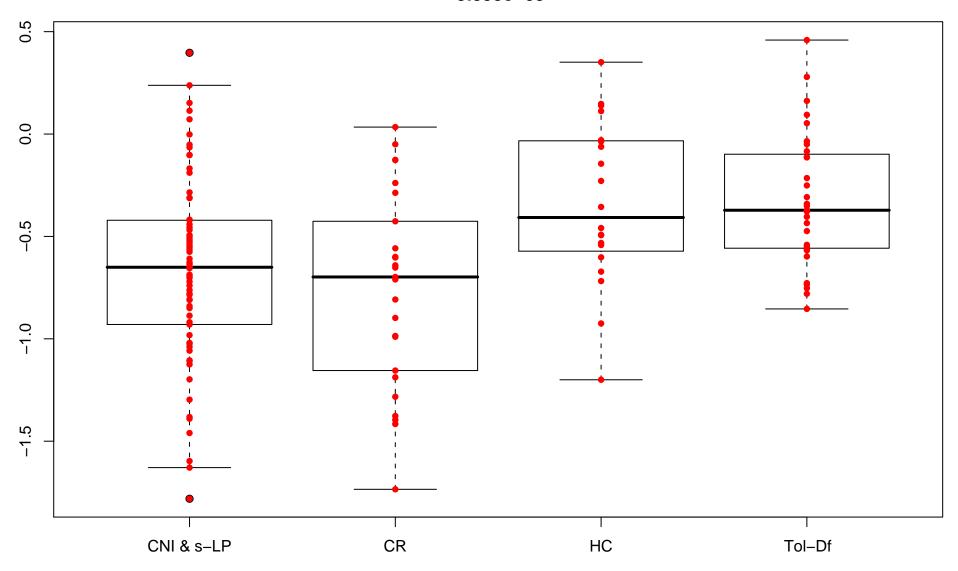
Rank 391 : RSL1D1 9.415e-05



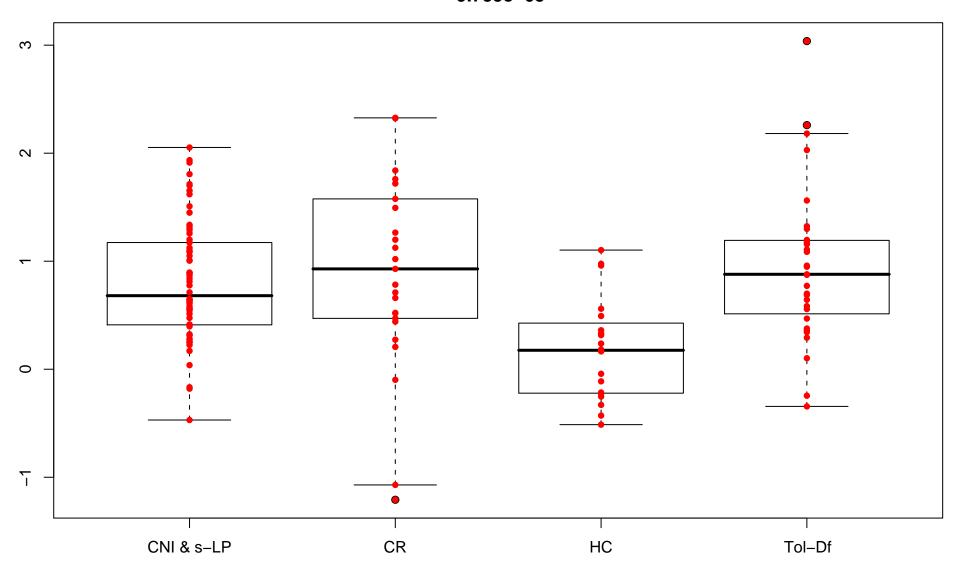
Rank 392 : PTMA 9.517e-05



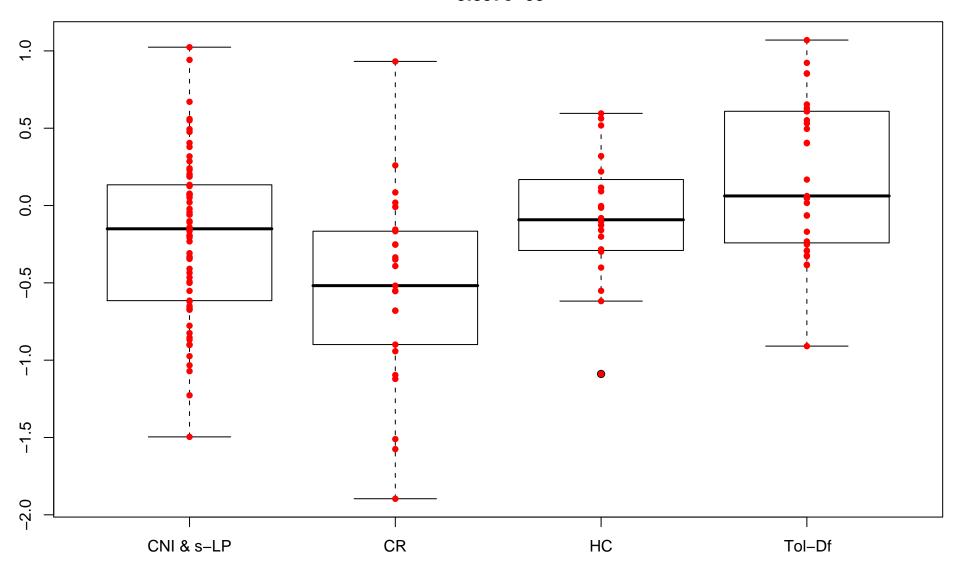
Rank 393 : CDK4 9.595e-05



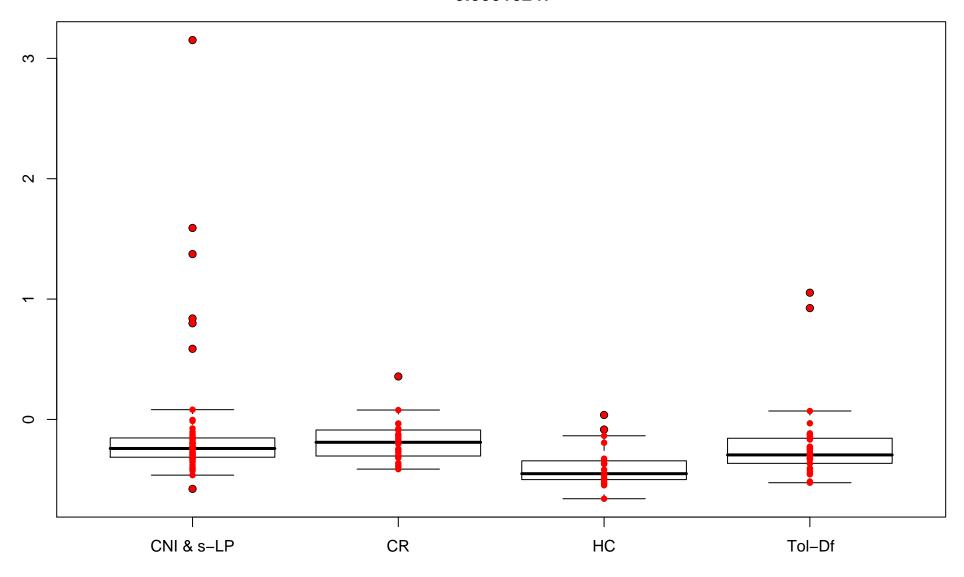
Rank 394 : BC033983 9.735e-05



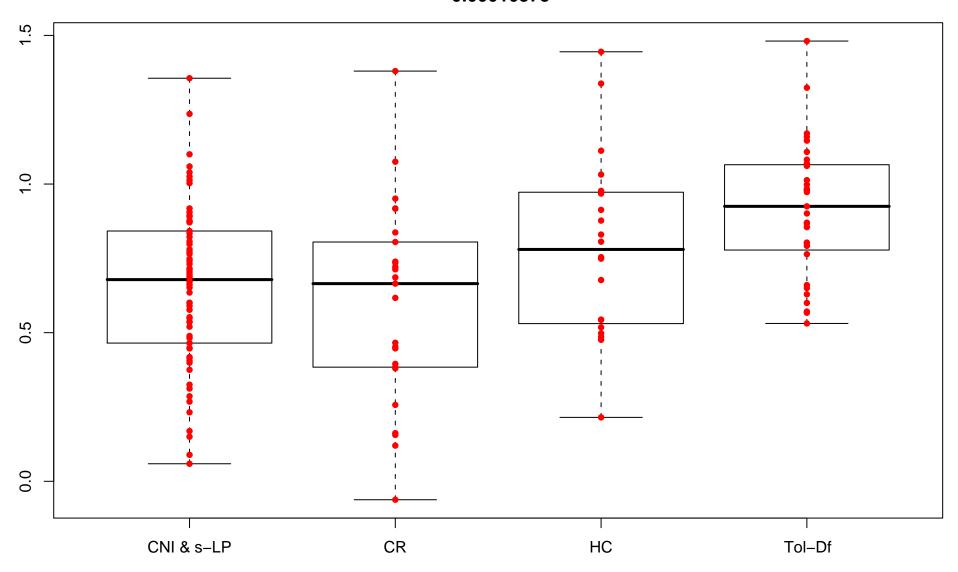
Rank 395 : STAT4 9.897e-05



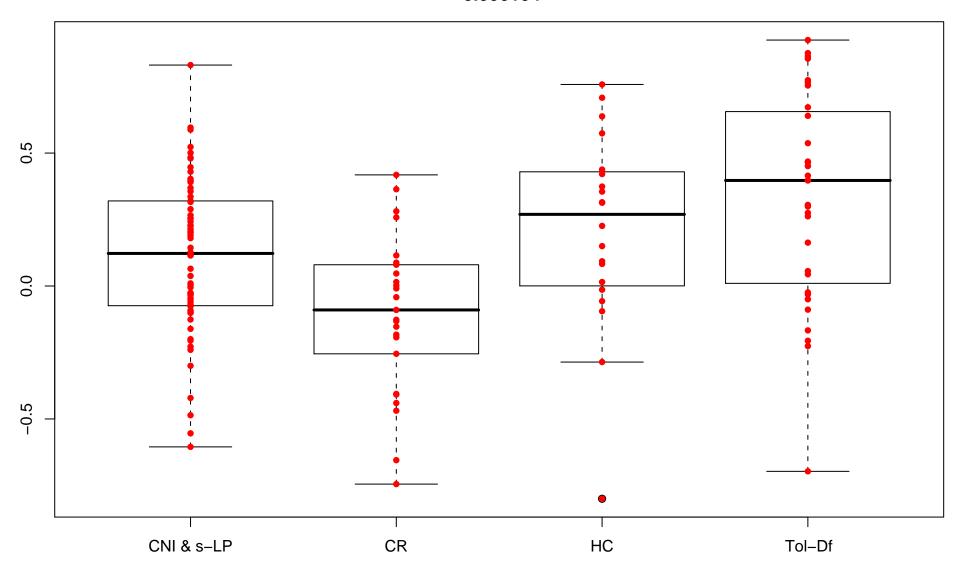
Rank 396 : FAT 0.00010247



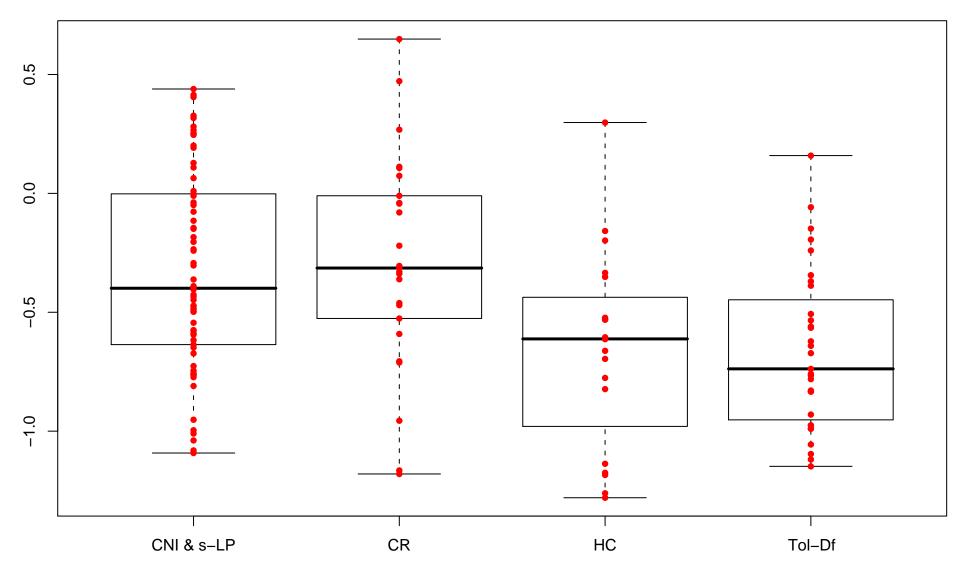
Rank 397 : ZNF264 0.00010373



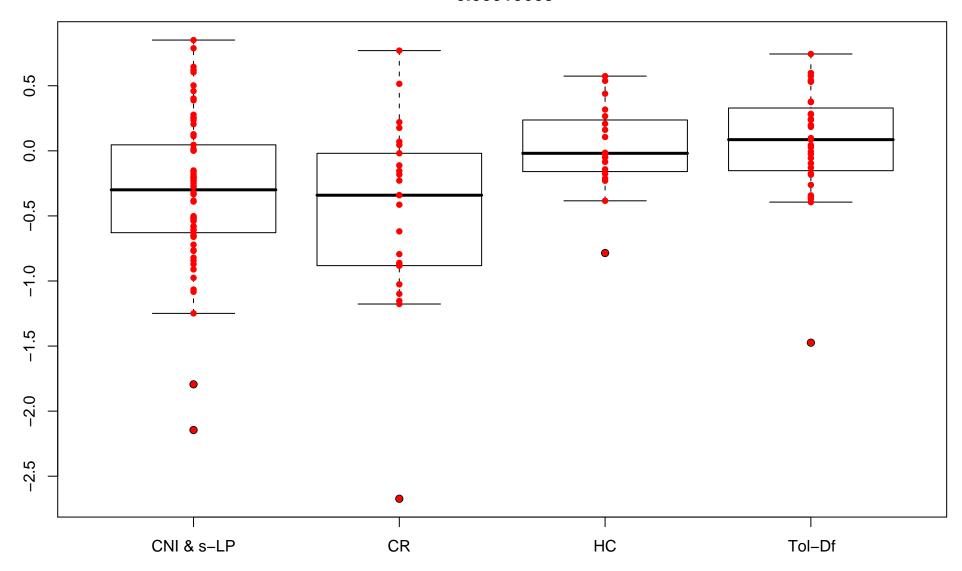
Rank 398 : PILRB 0.000104



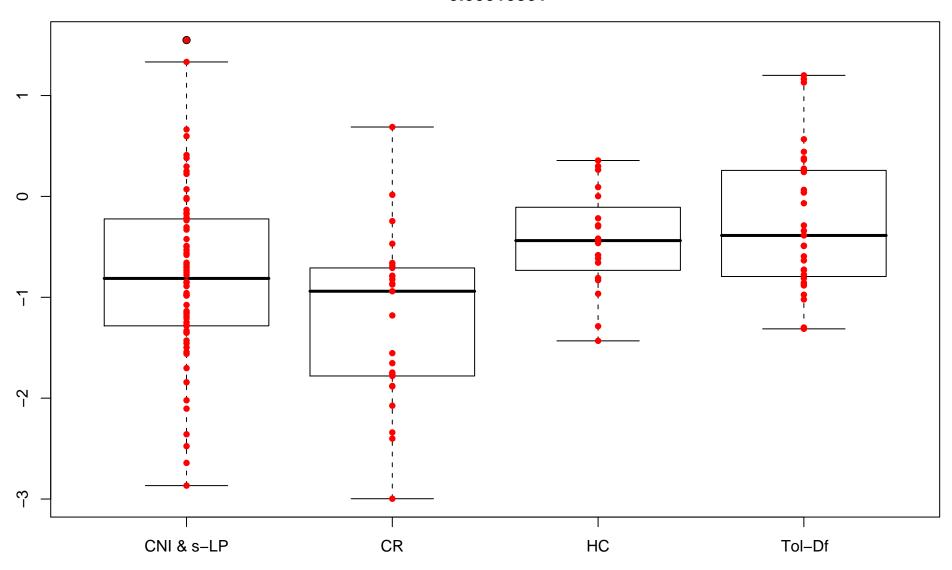
Rank 399 : EVI2B 0.00010402



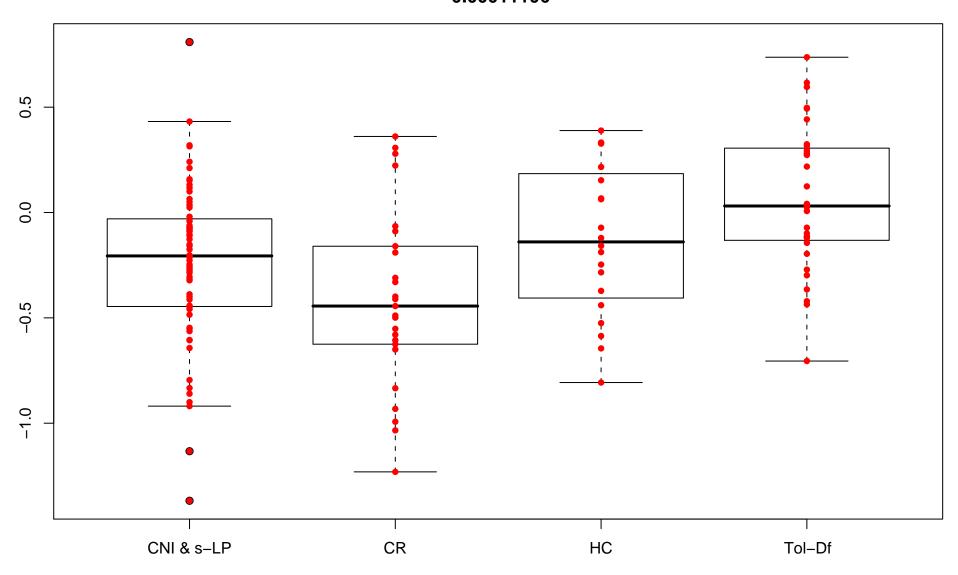
Rank 400 : C5ORF28 0.00010603



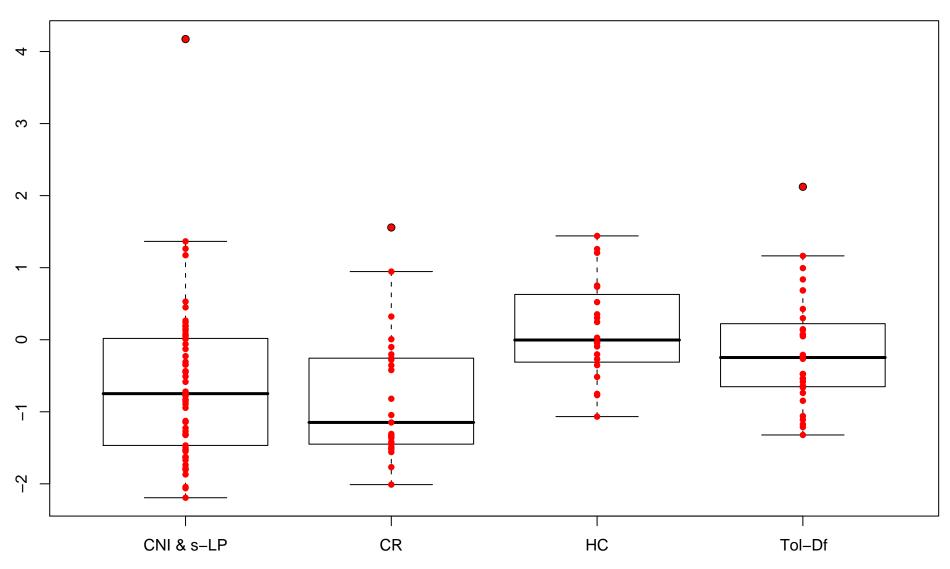
Rank 401 : A\_23\_P399604 0.00010801



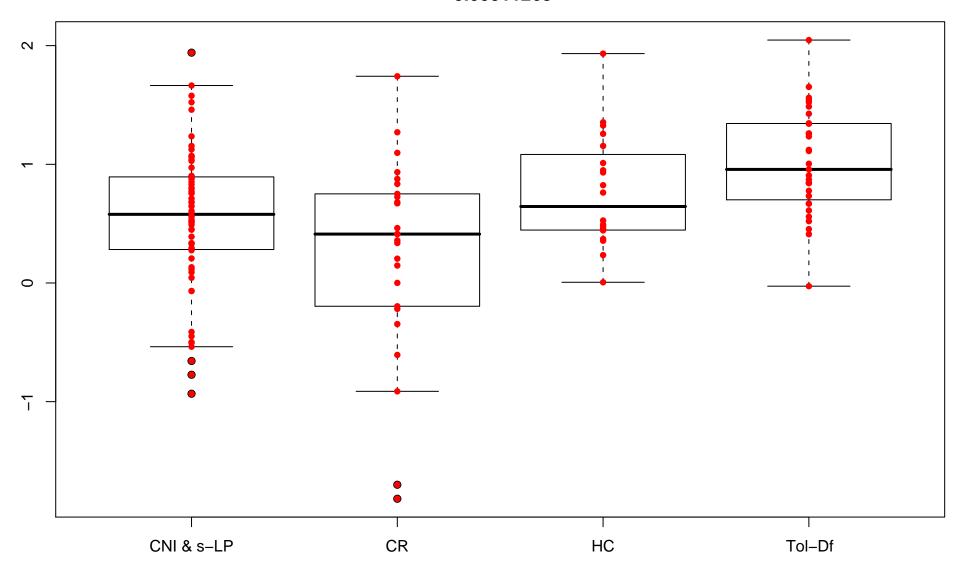
Rank 402 : FAM108A1;FAM108A2;FAM108A3 0.00011106



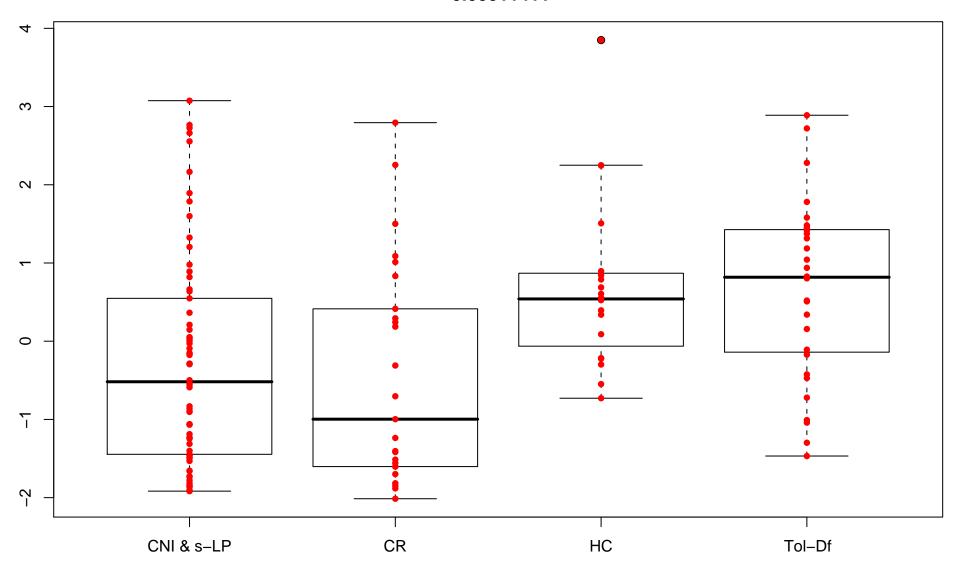
Rank 403 : RHOBTB3 0.00011157



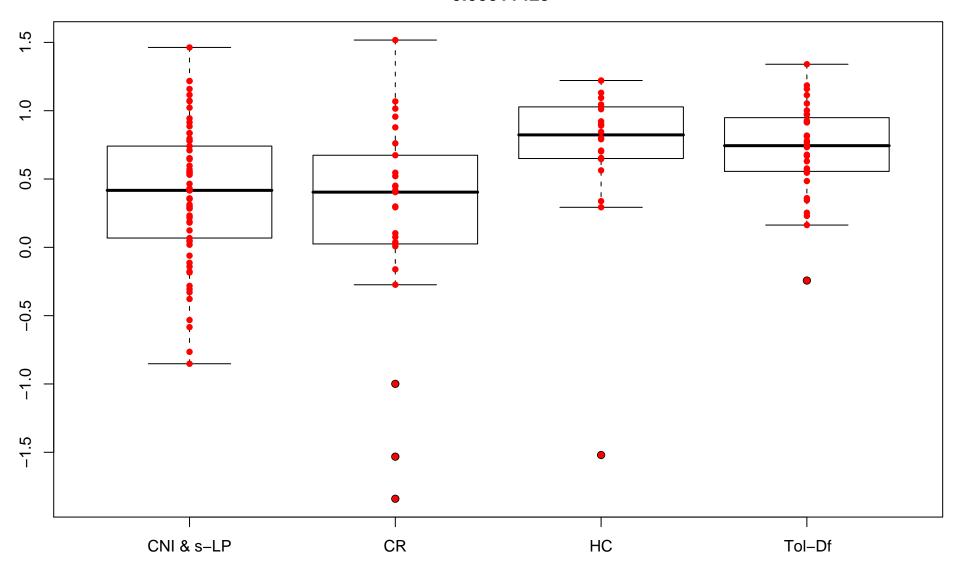
Rank 404 : PLCG1 0.00011268



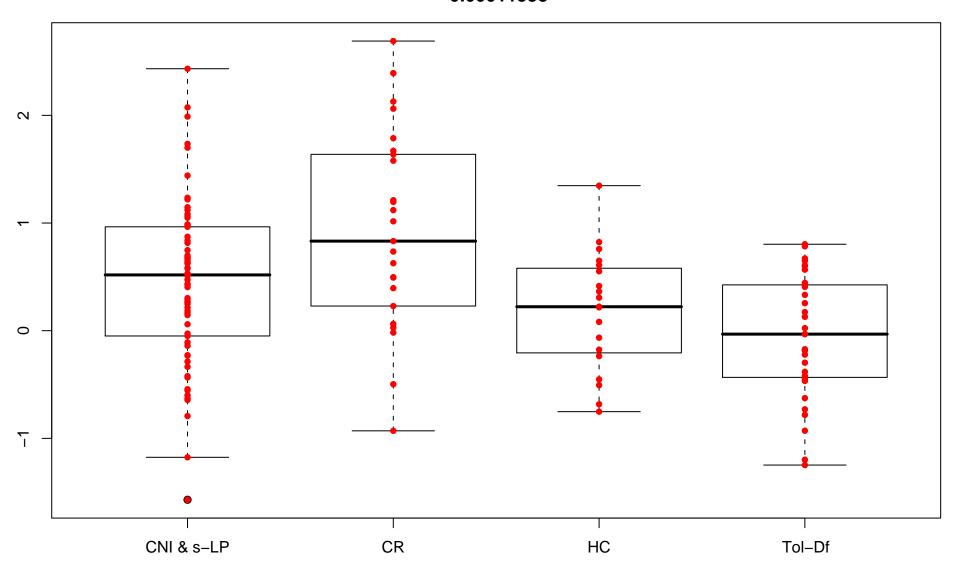
Rank 405 : SLC7A8 0.00011411



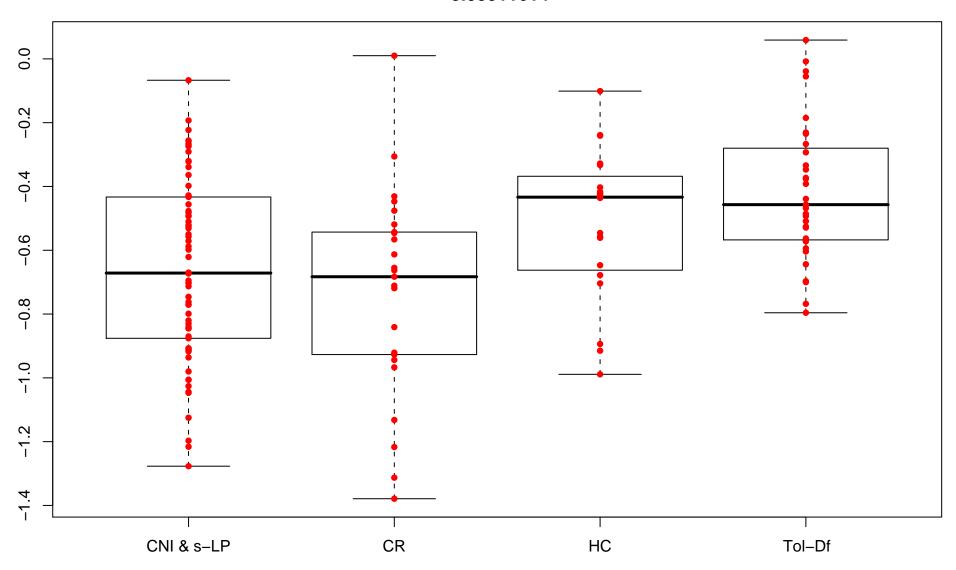
Rank 406 : PPARA 0.00011429



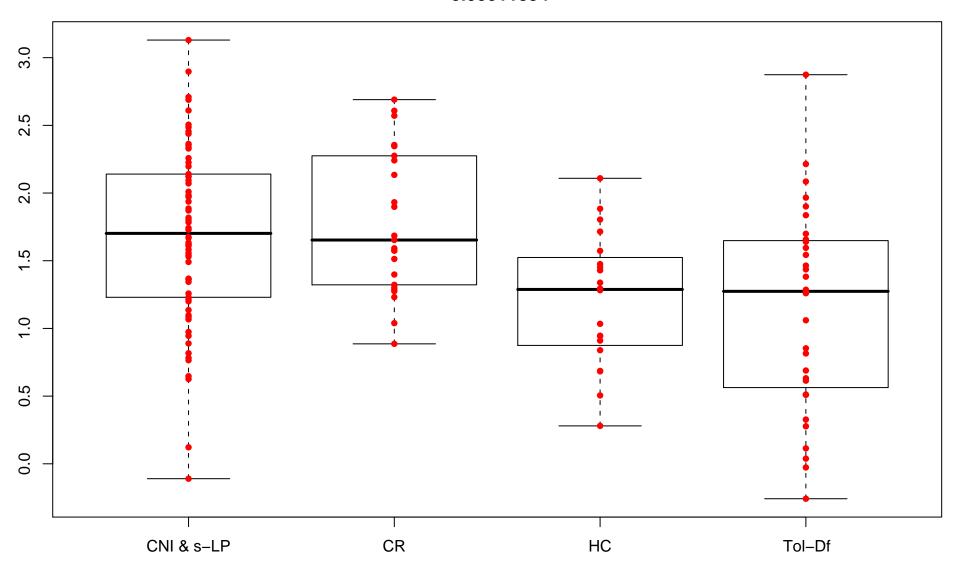
Rank 407 : PBX1 0.00011538



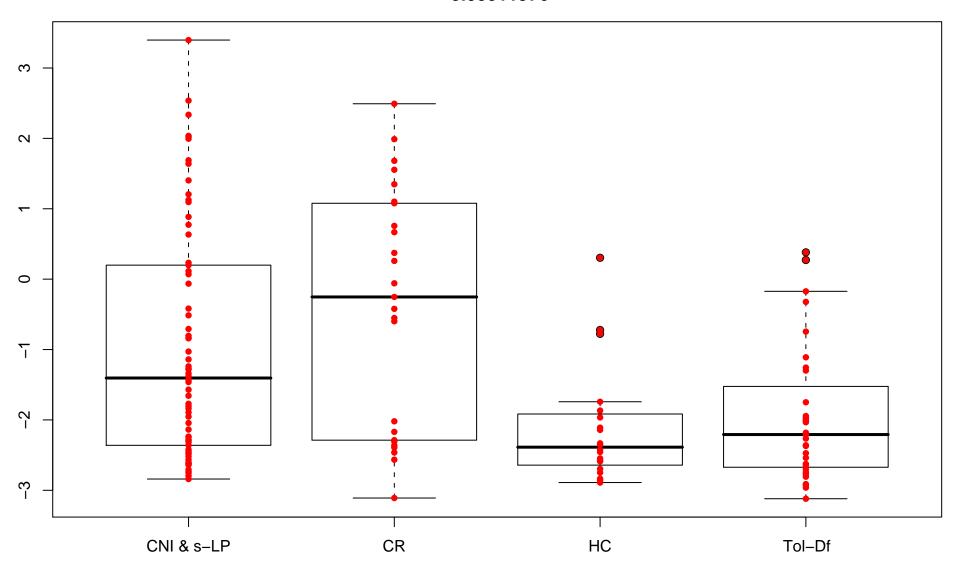
Rank 408 : RPS27L 0.00011614



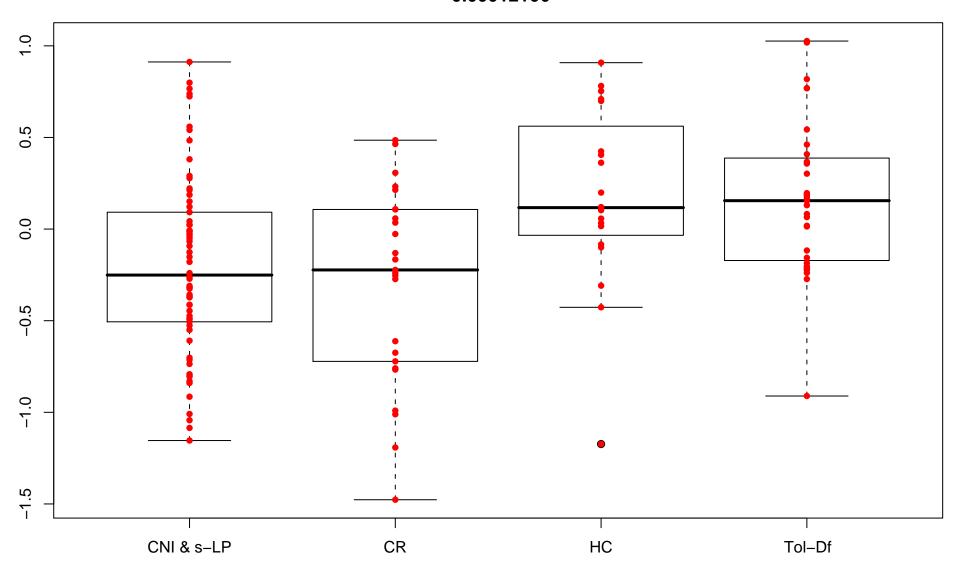
Rank 409 : C8ORF60 0.00011894



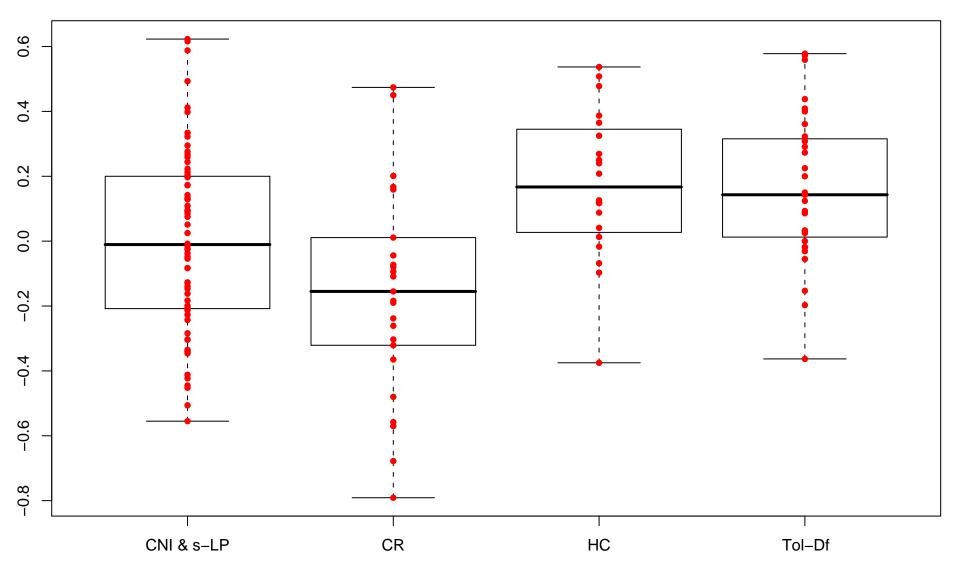
Rank 410 : OLAH 0.00011976



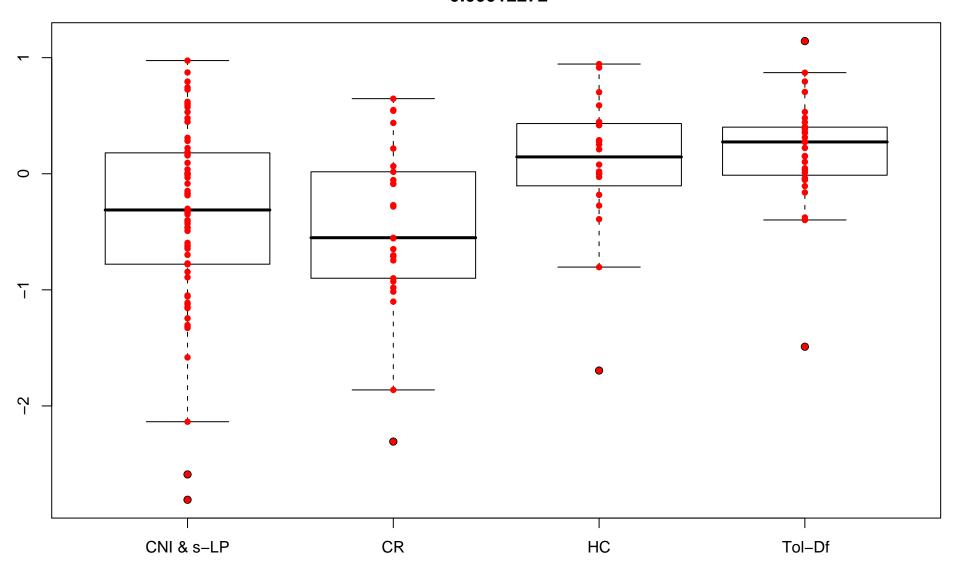
Rank 411 : MKI67IP 0.00012106



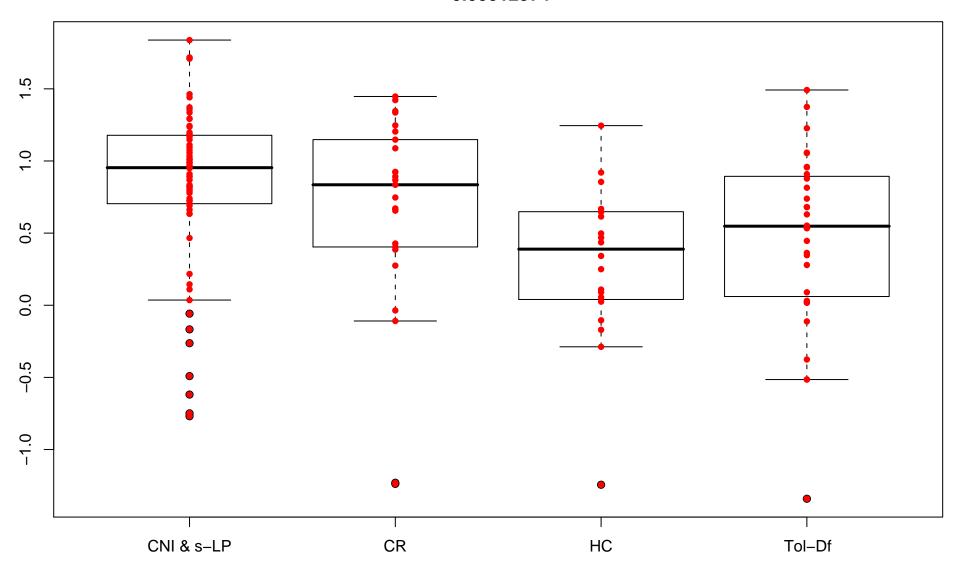
Rank 412 : C16ORF63 0.00012154



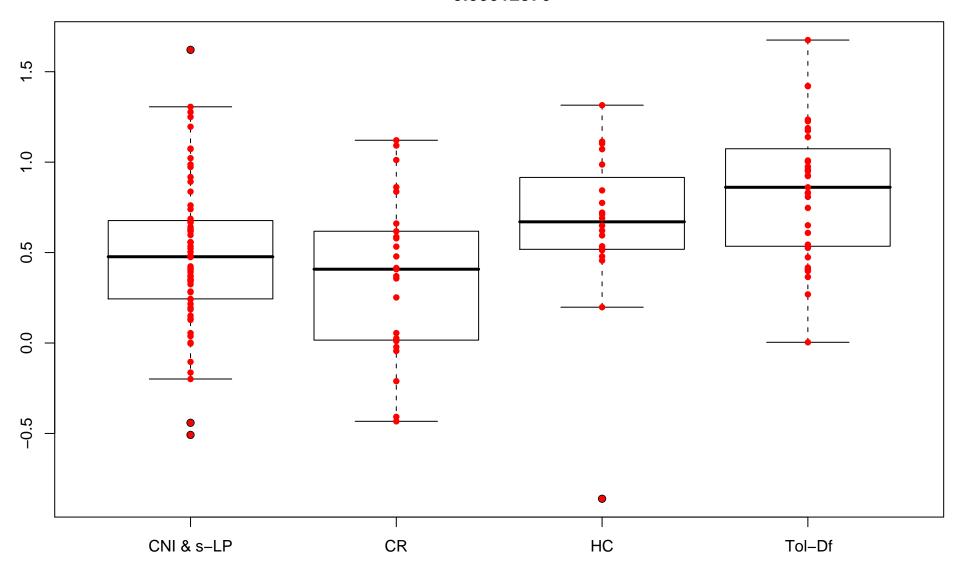
Rank 413 : PEX3 0.00012272



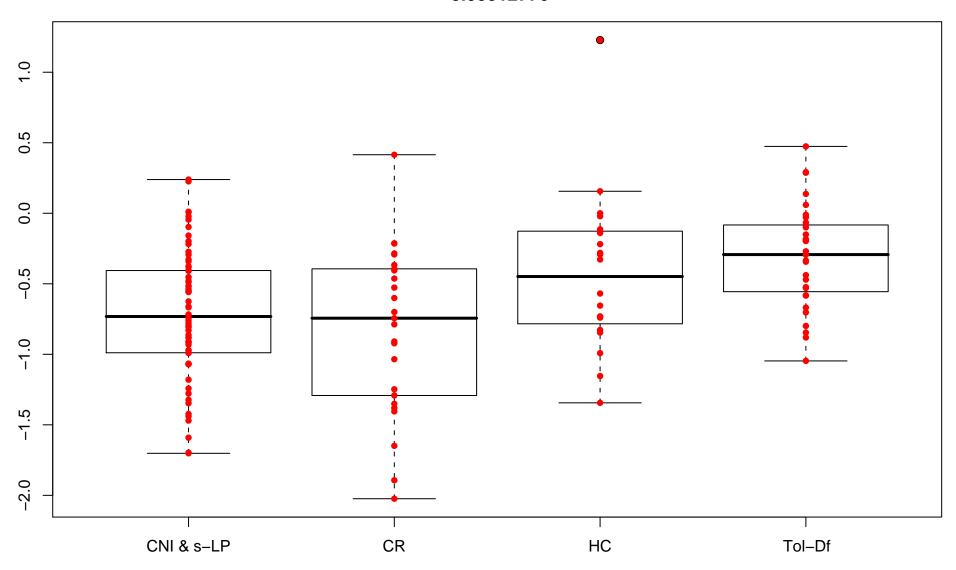
Rank 414 : FLJ21272 0.00012374



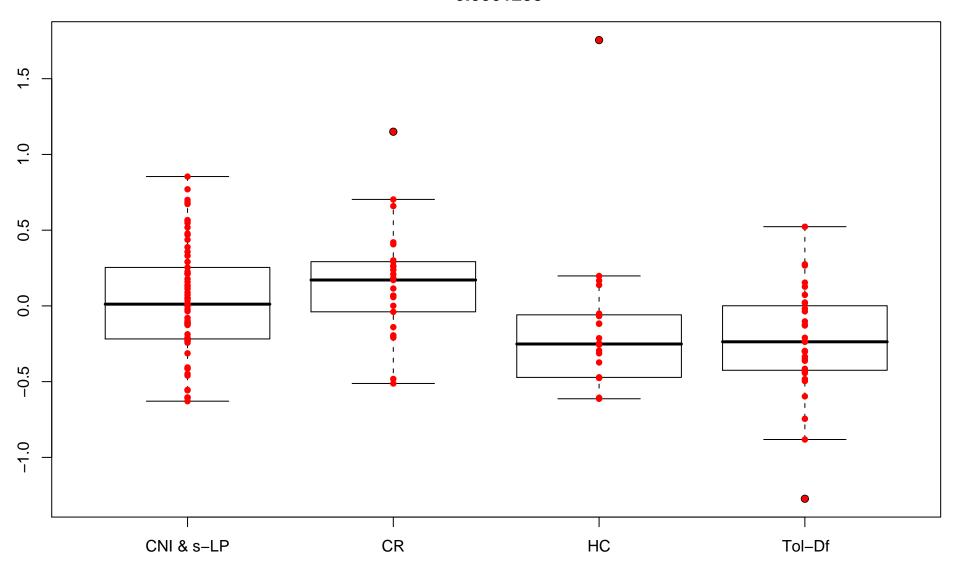
Rank 415 : TOP2B 0.00012376



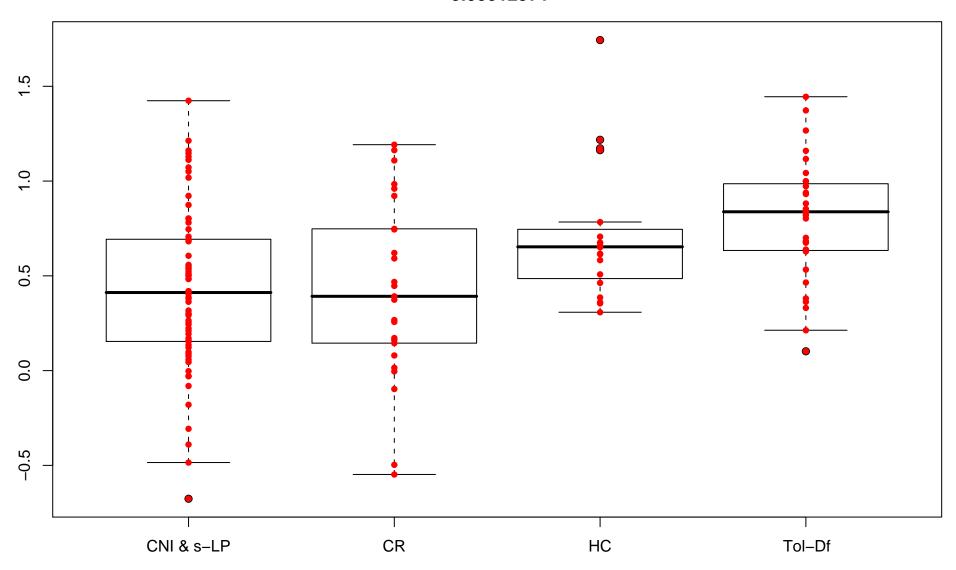
Rank 416 : ICAM2 0.00012776



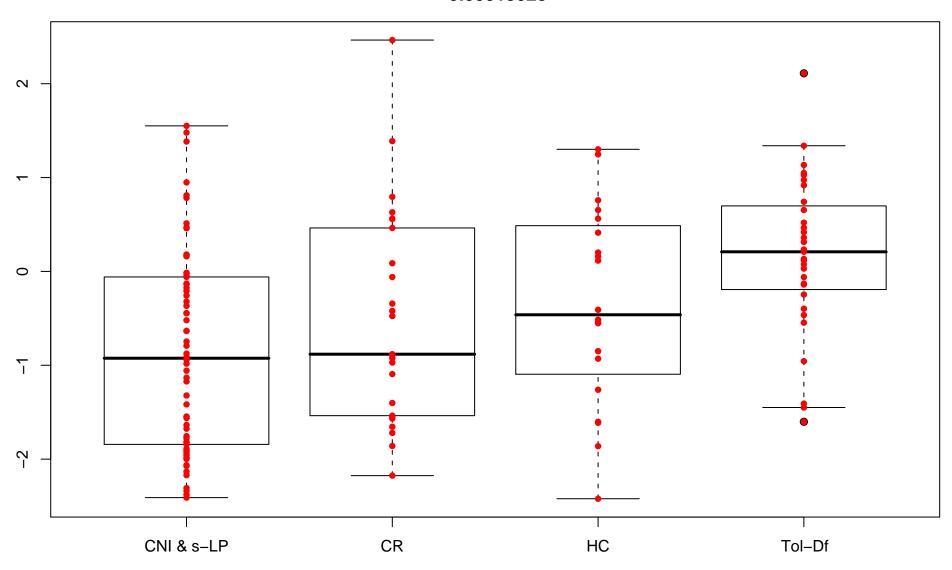
Rank 417 : WWP2 0.0001288



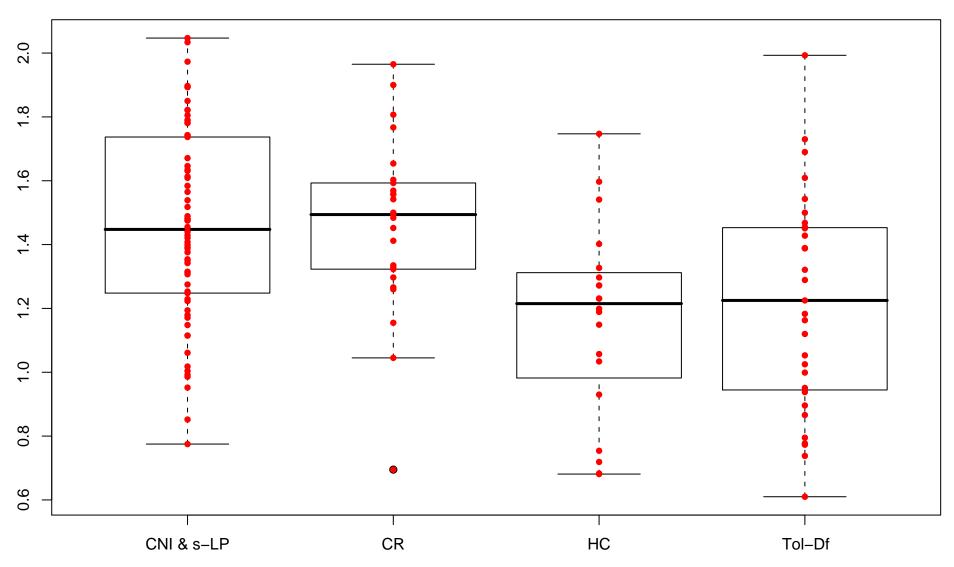
Rank 418 : SMAD3 0.00012971



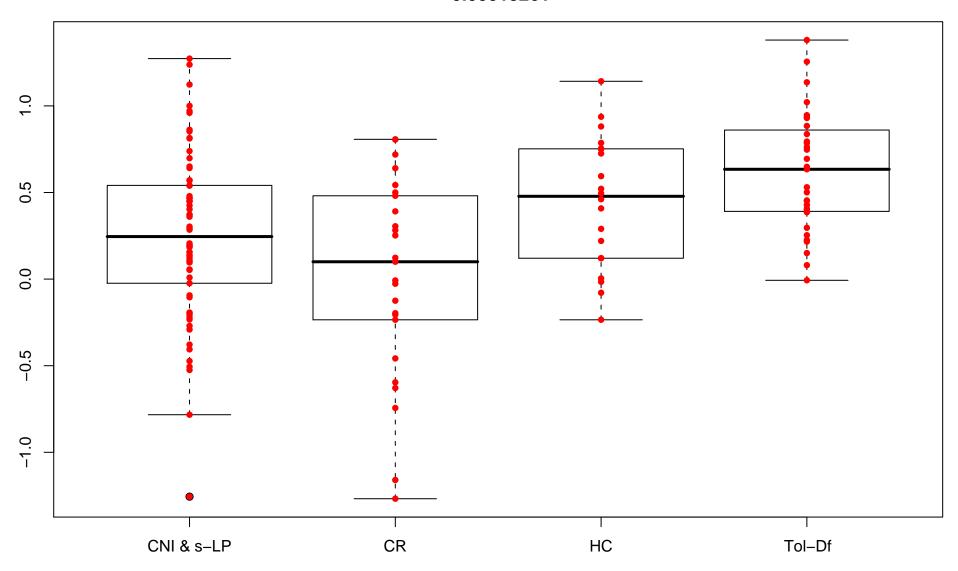
Rank 419 : QRSL1 0.00013028



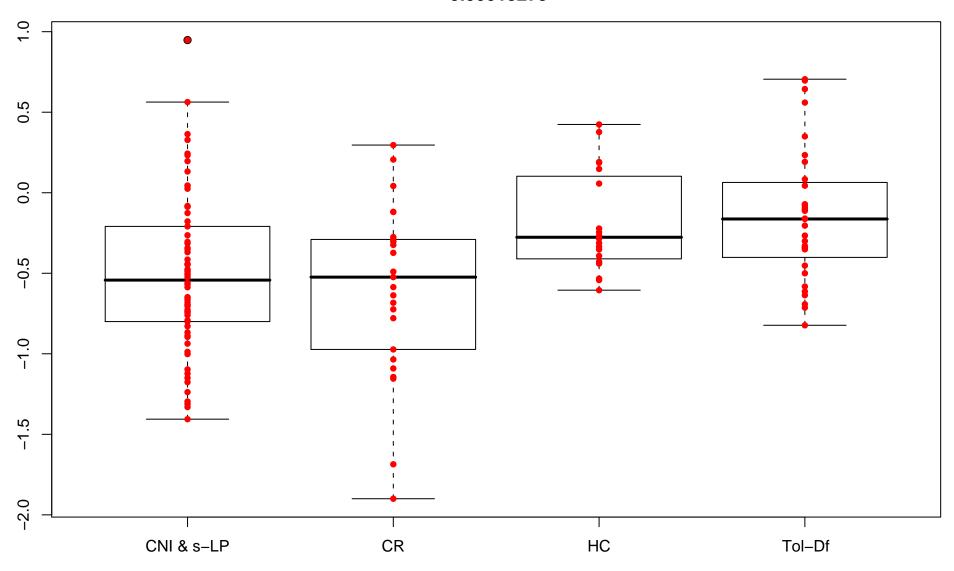
Rank 420 : APOB48R 0.00013257



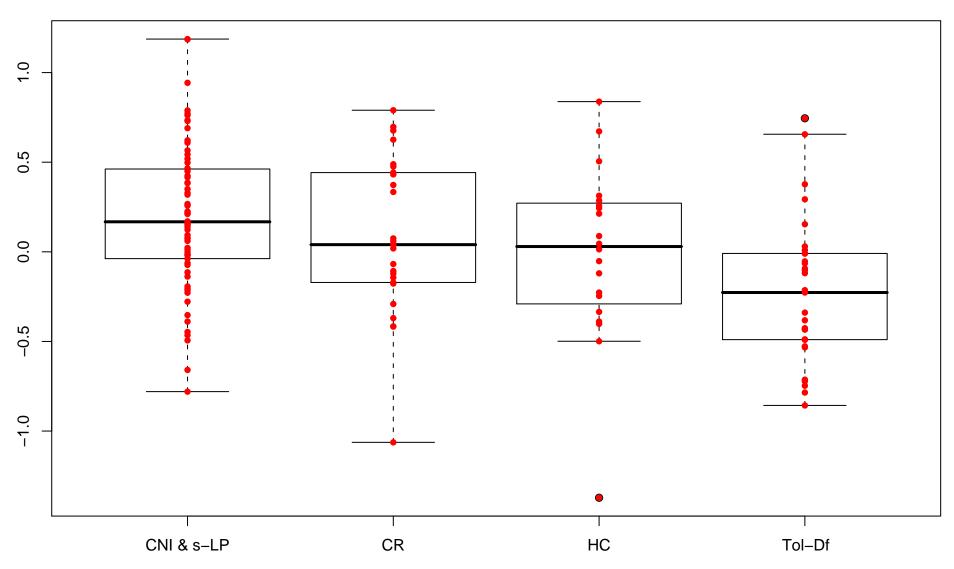
Rank 421 : TNRC8 0.00013261



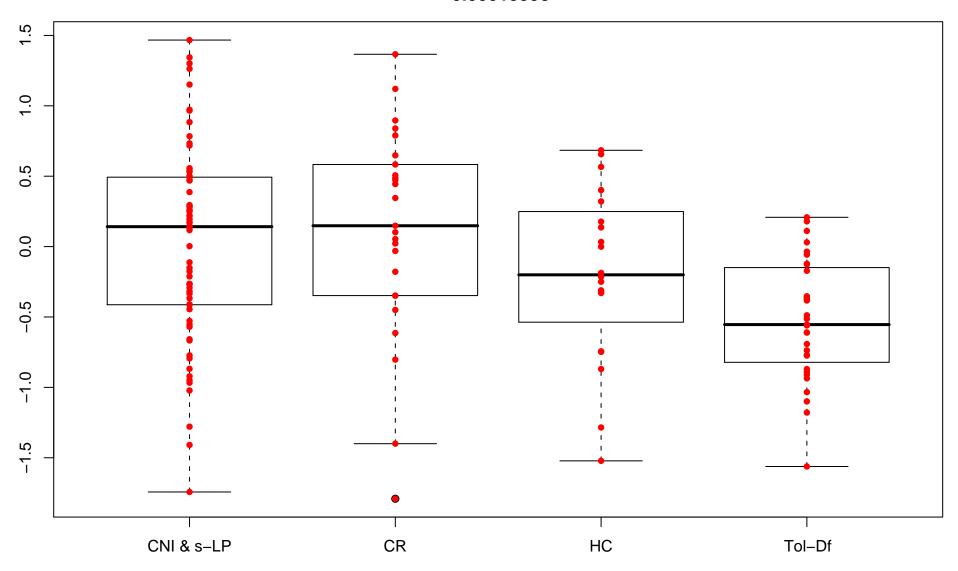
Rank 422 : SLC39A8 0.00013279



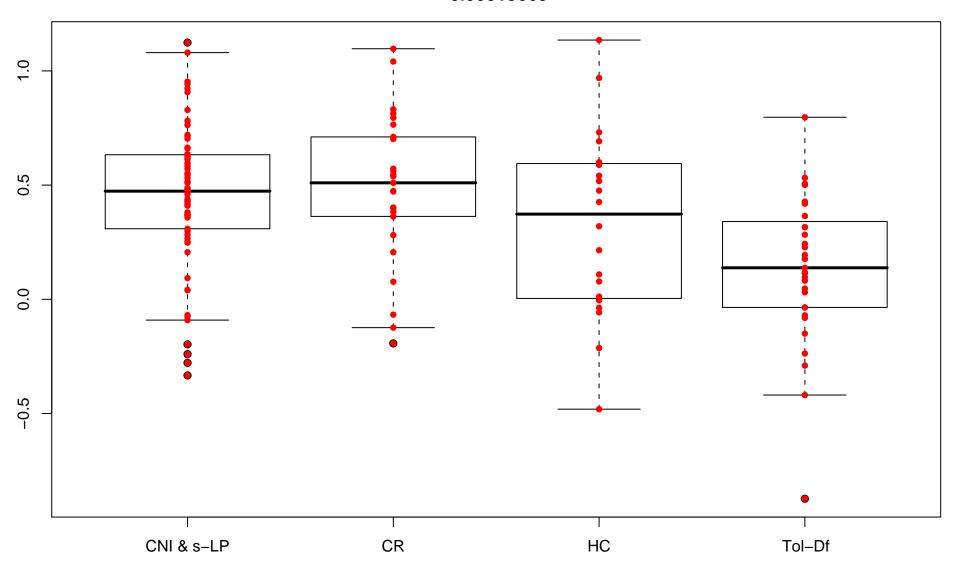
Rank 423 : MAPK14 0.00013338



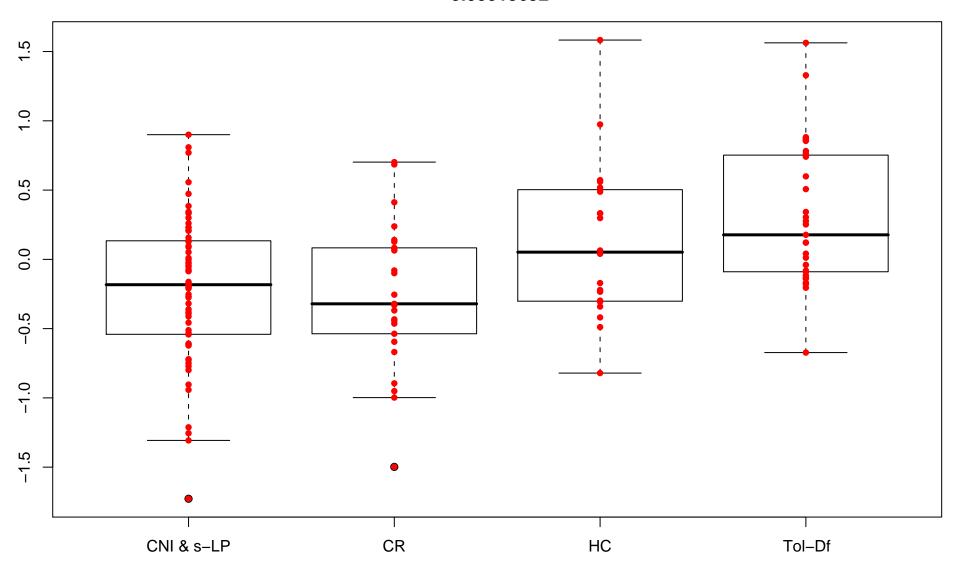
Rank 424 : EFCAB2 0.00013598



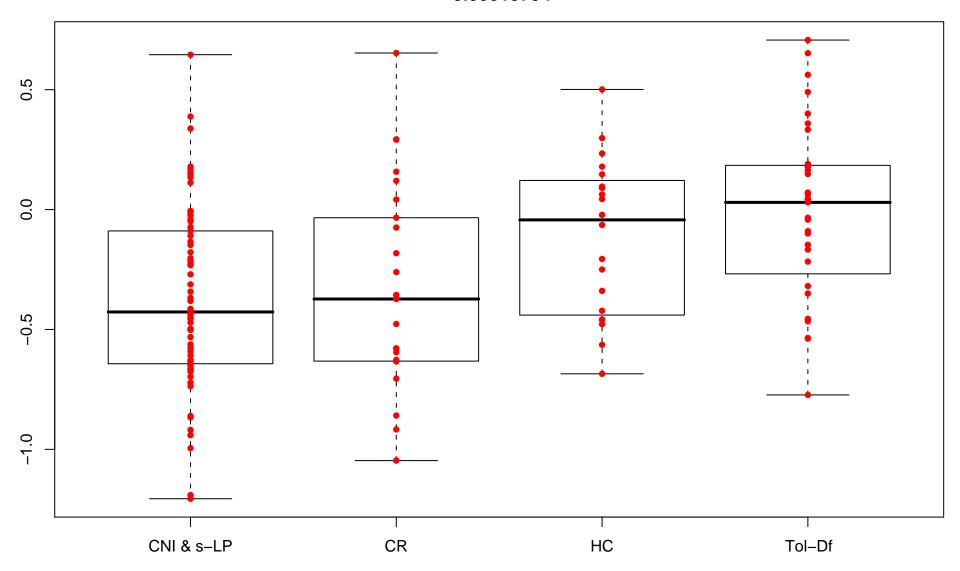
Rank 425 : PRKCD 0.00013663



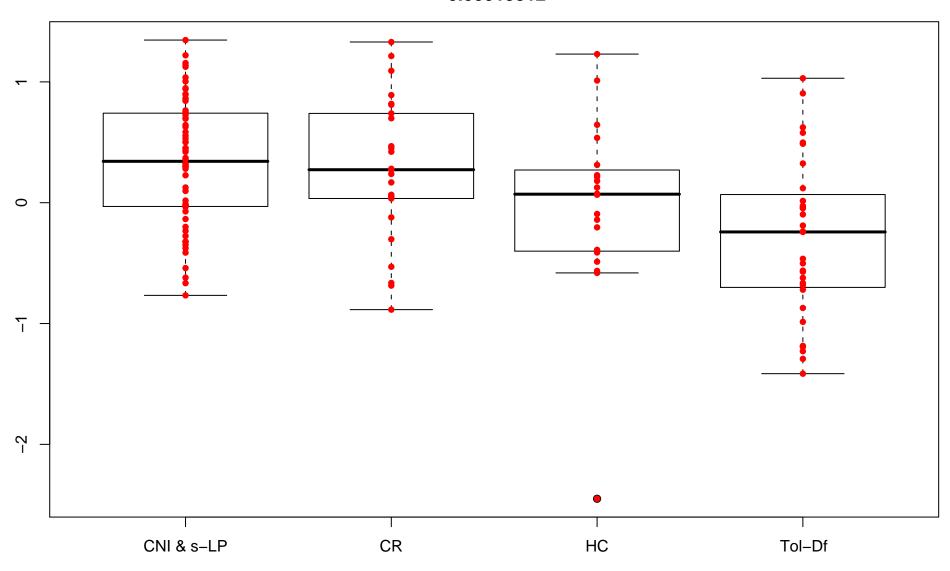
Rank 426 : WDR21A 0.00013692



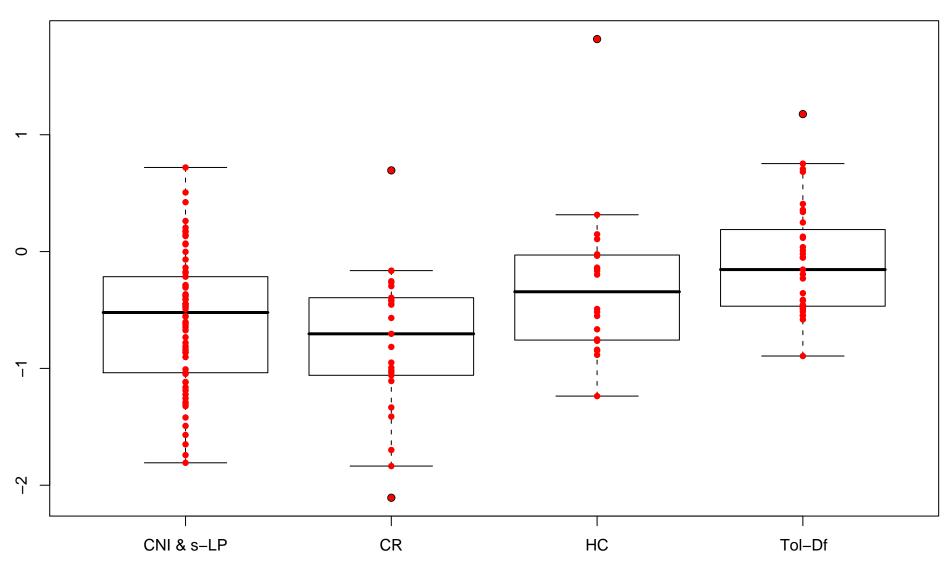
Rank 427 : DBI 0.00013734



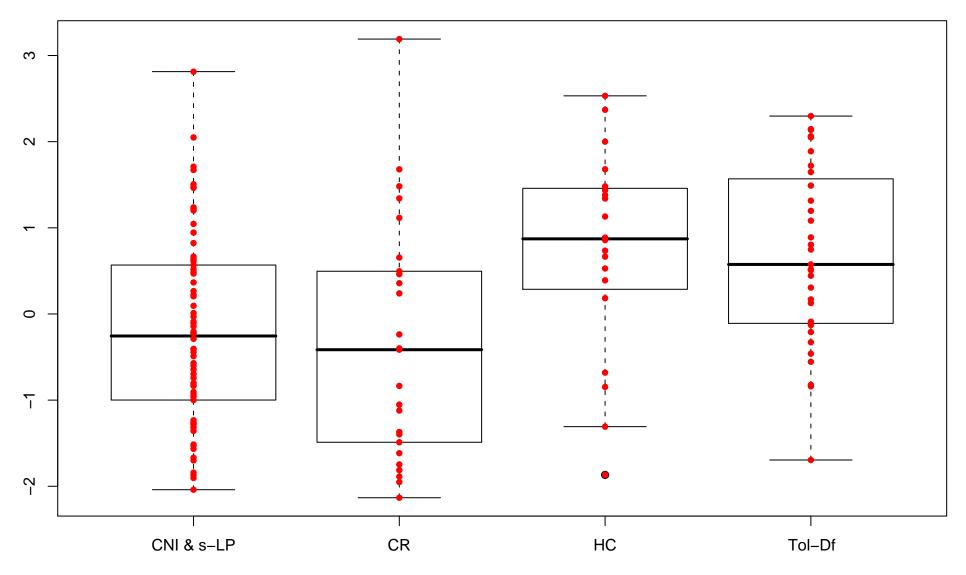
Rank 428 : B3GNT5 0.00013812



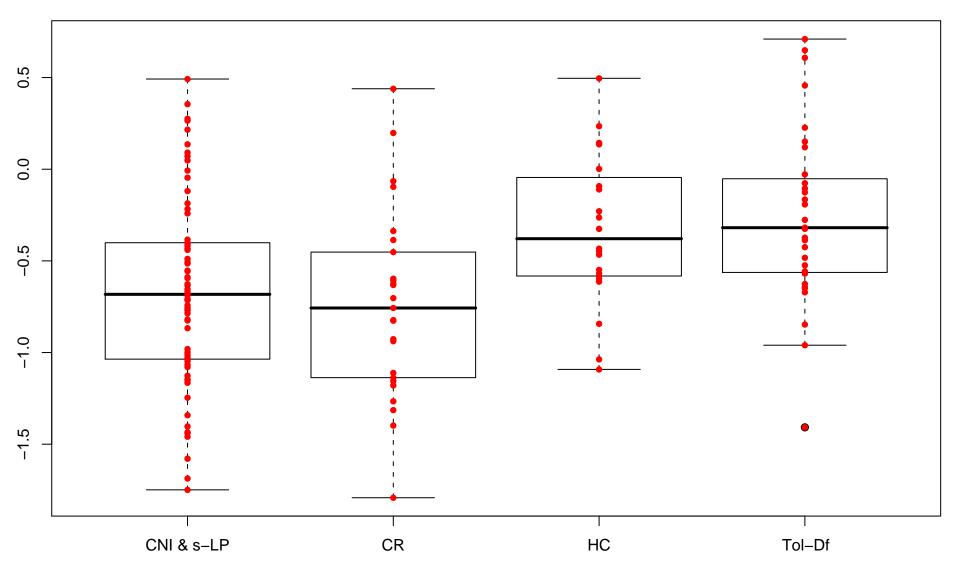
Rank 429 : C5ORF39 0.0001408



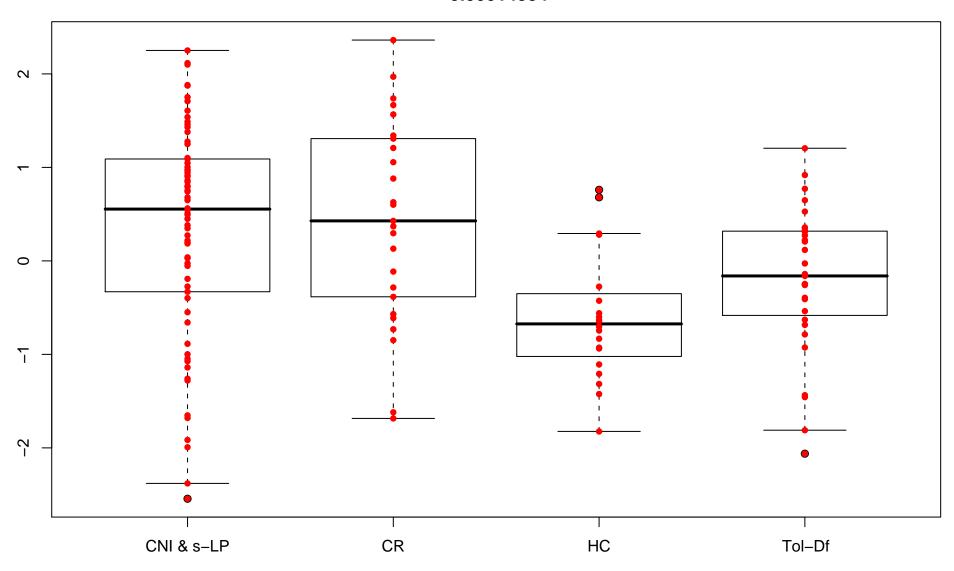
Rank 430 : EMR4 0.00014104



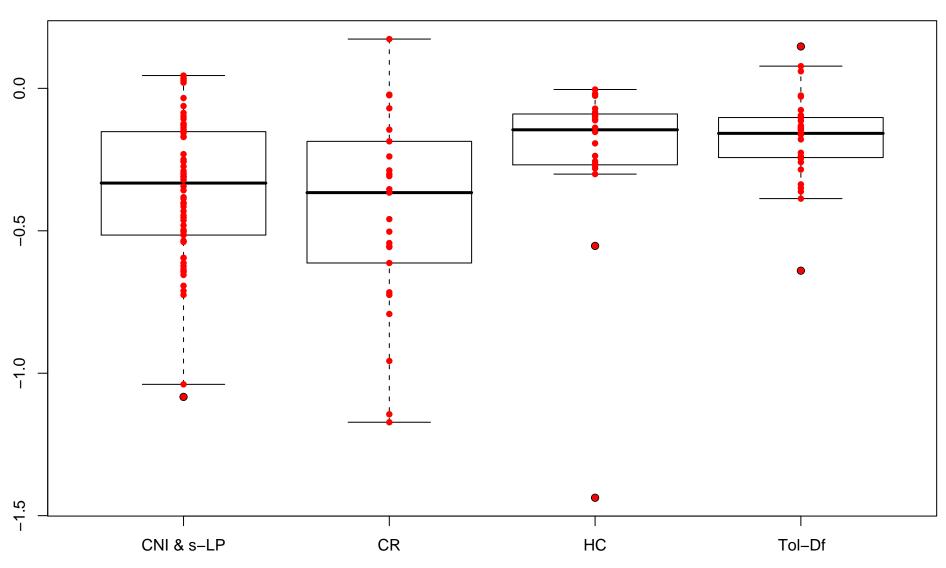
Rank 431 : ASF1A 0.00014306



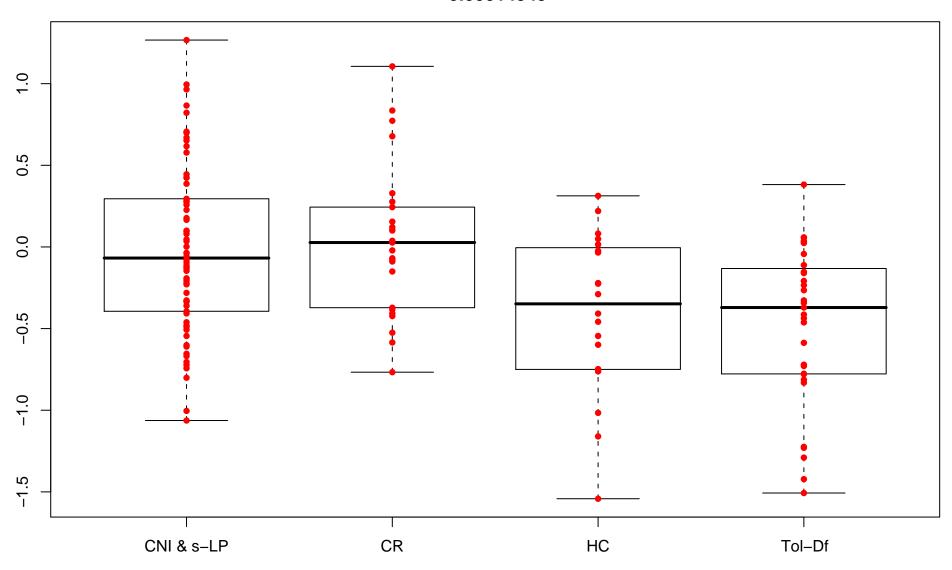
Rank 432 : FLJ36840 0.00014354



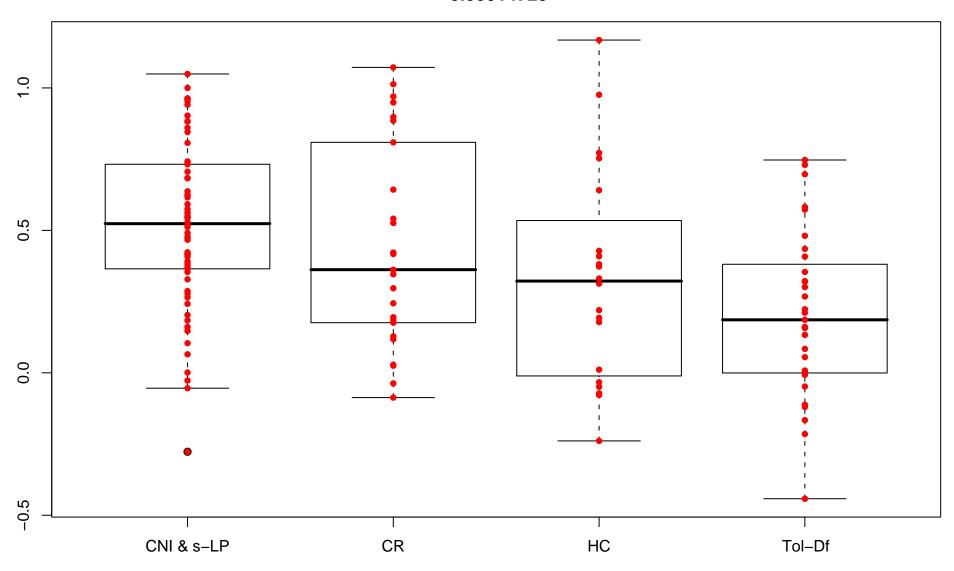
Rank 433 : PDCD6 0.00014419



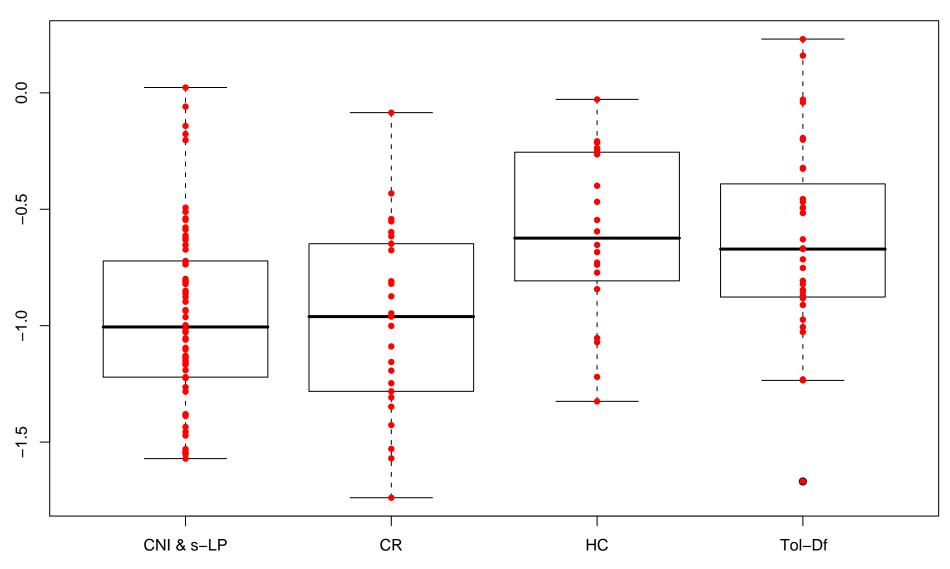
Rank 434 : SRXN1 0.00014549



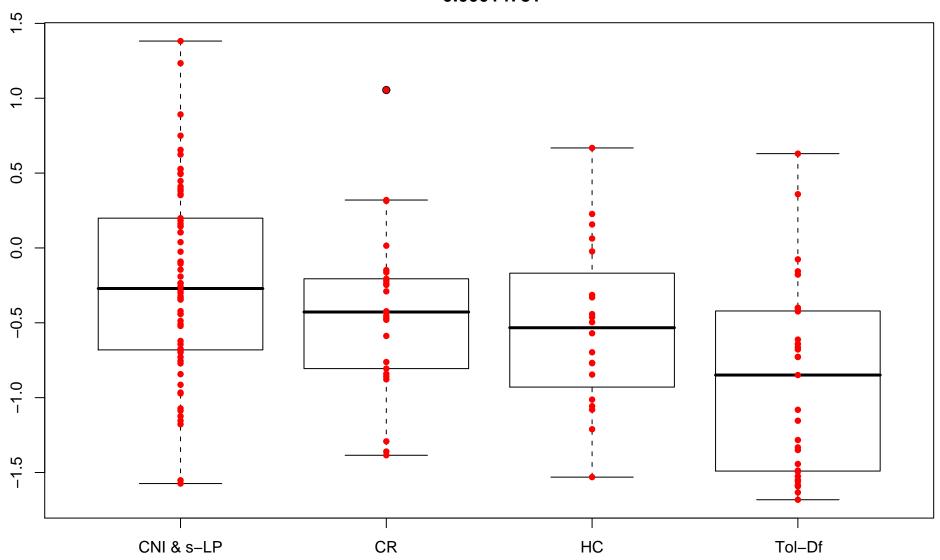
Rank 435 : RP2 0.00014725



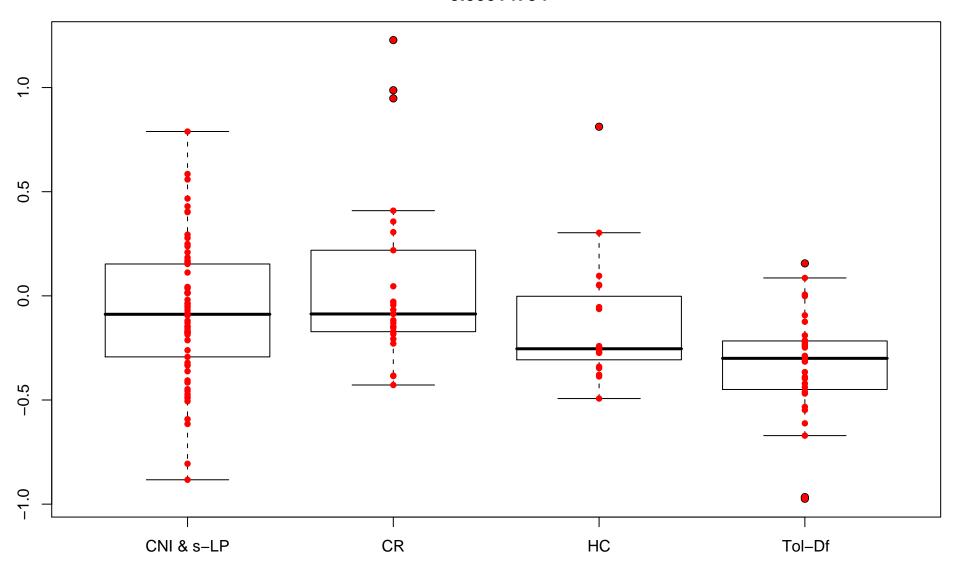
Rank 436 : C1QBP 0.00014762



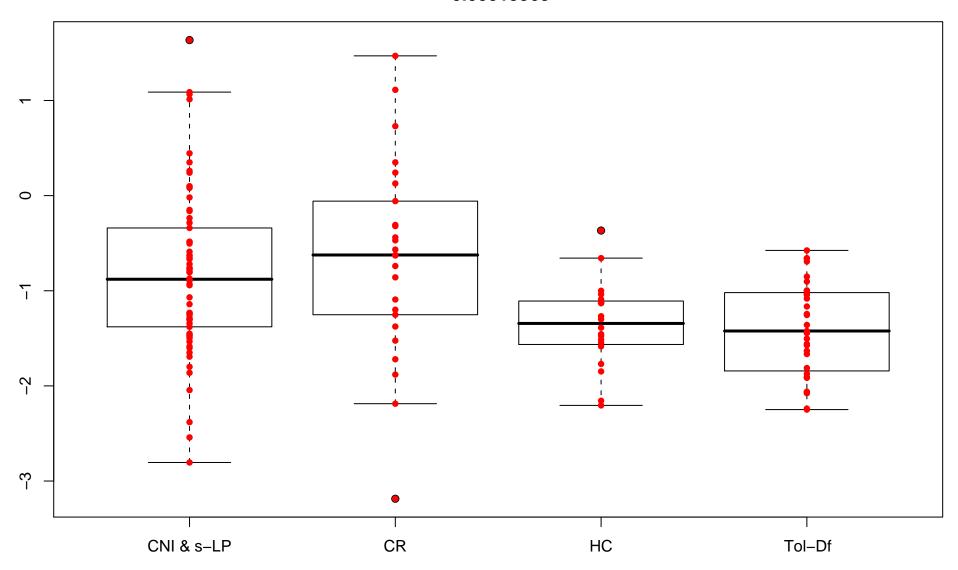
Rank 437 : FLJ32866 0.00014781



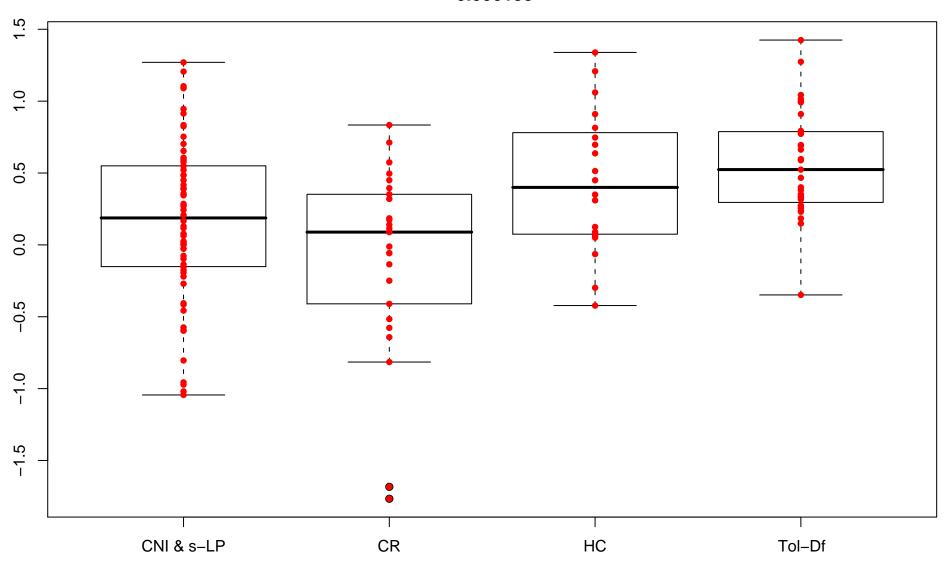
Rank 438 : CCRL2;LOC727811 0.00014794



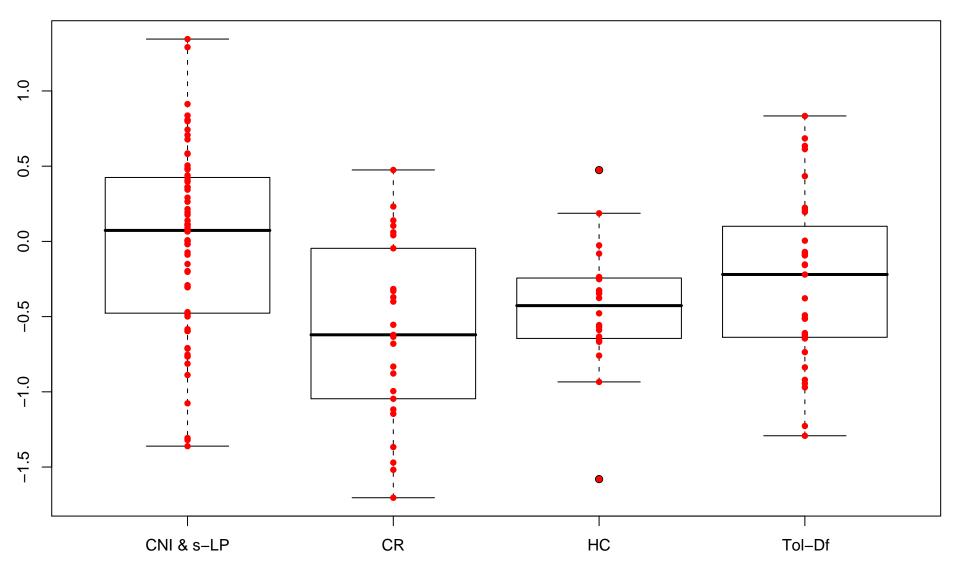
Rank 439 : RHCE;RHD 0.00015363



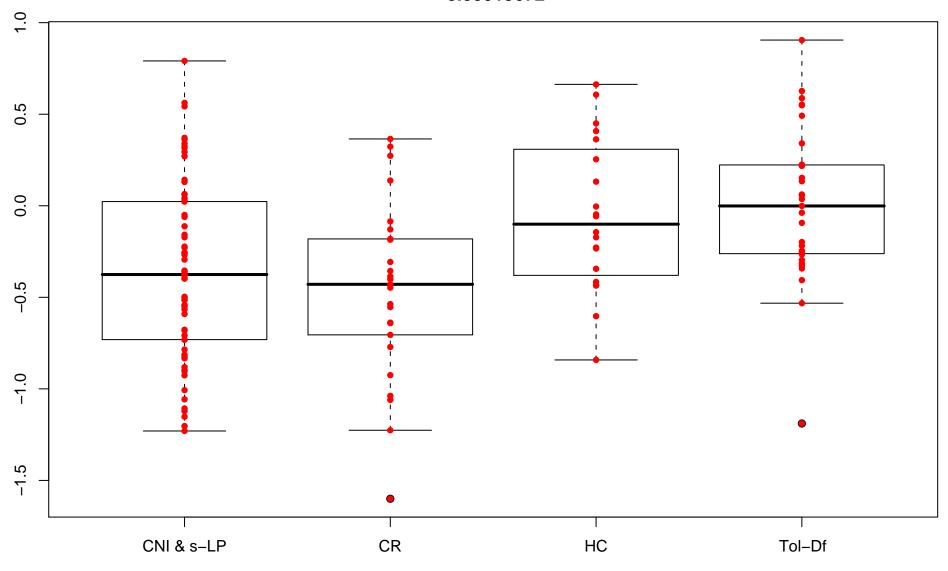
Rank 440 : MTA3 0.000155



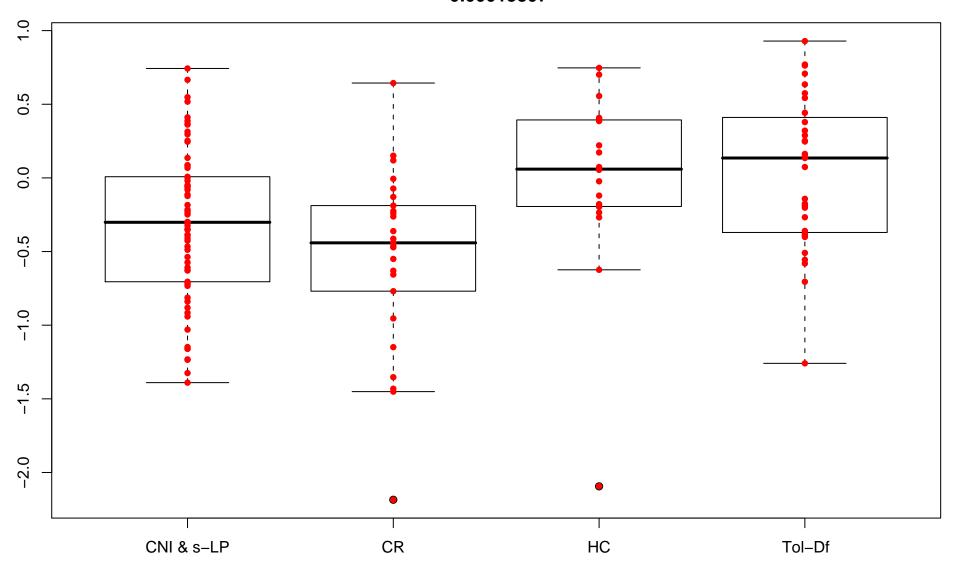
Rank 441 : CST7 0.00015569



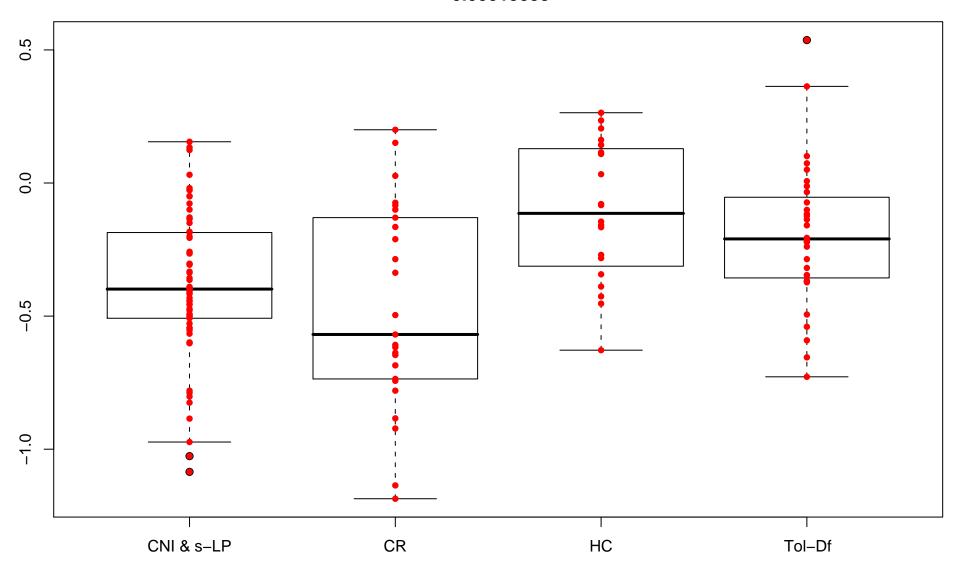
Rank 442 : CCT2 0.00015672



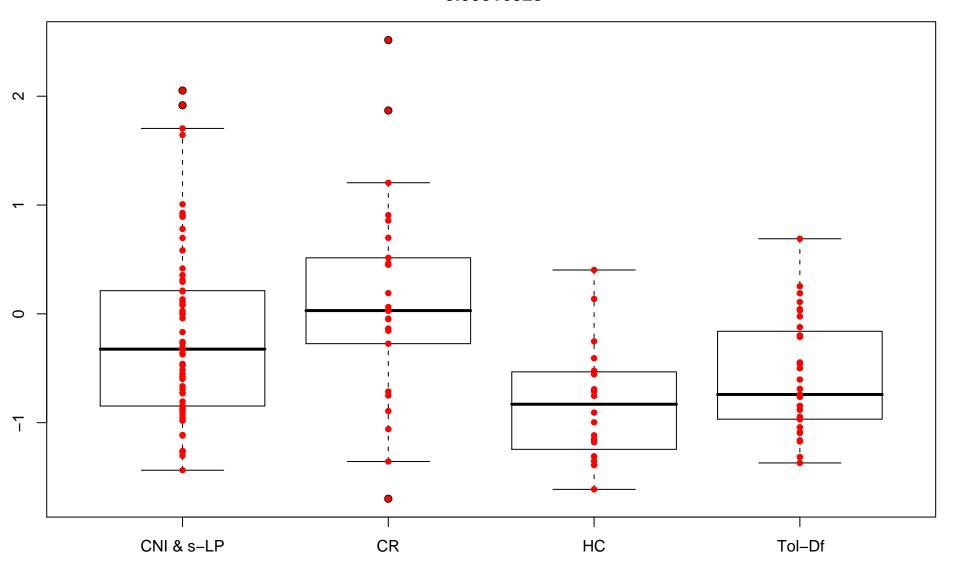
Rank 443 : XBP1 0.00015807



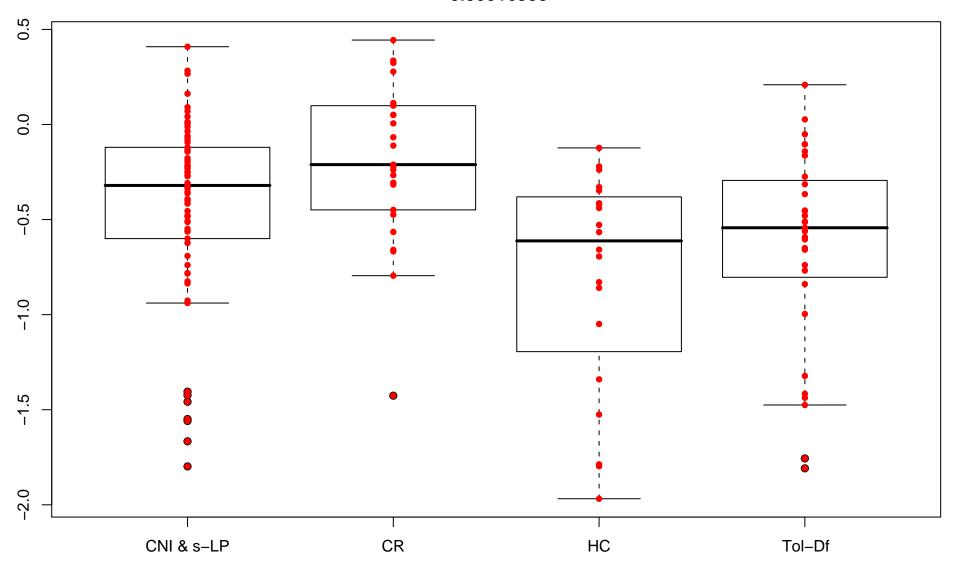
Rank 444 : ATP5F1 0.00015835



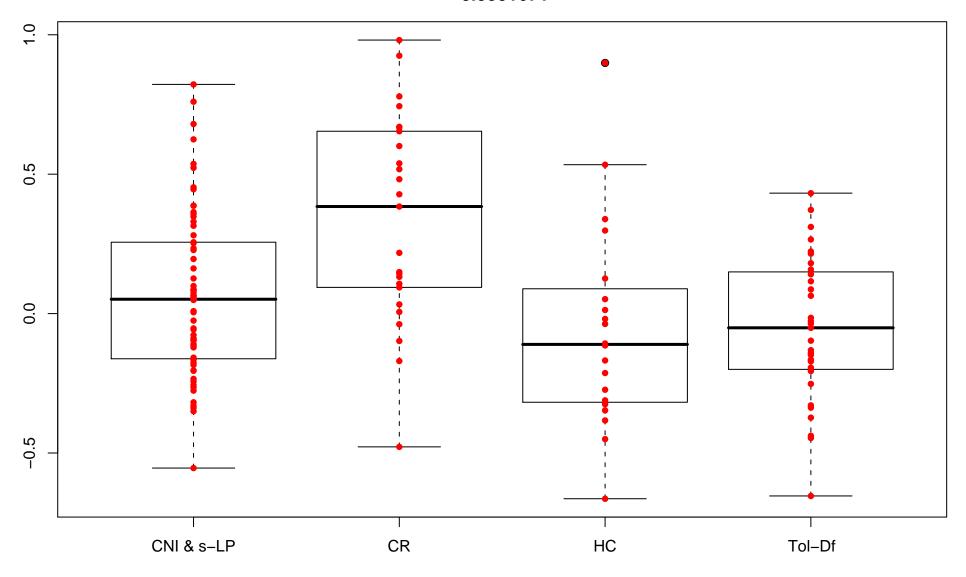
Rank 445 : EVI5 0.00016323



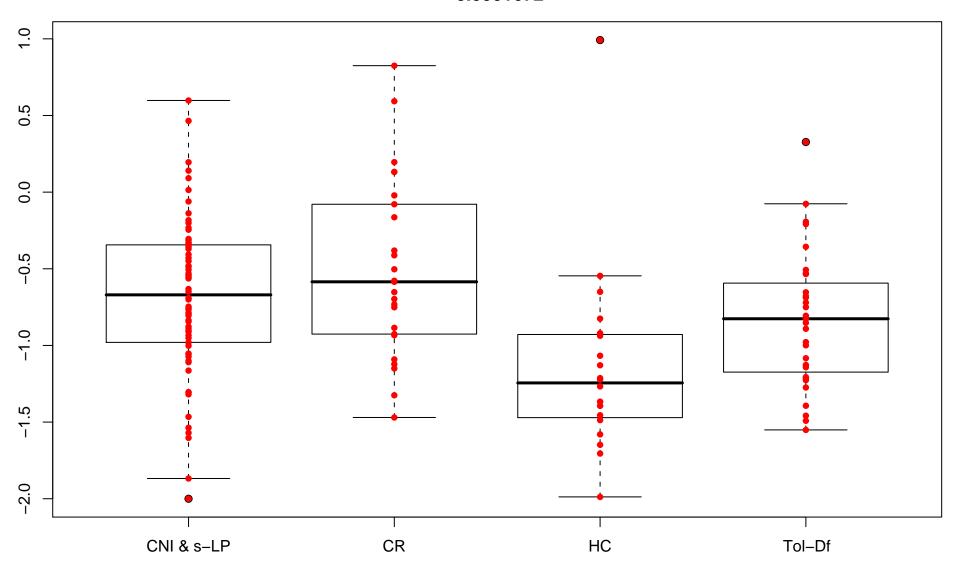
Rank 446 : LEPROT 0.00016338



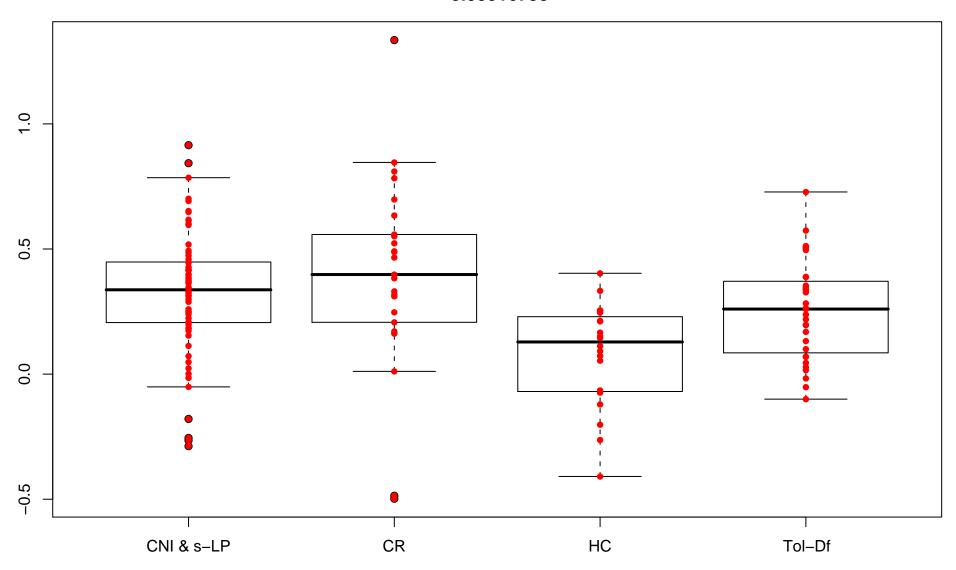
Rank 447 : FGD2 0.0001671



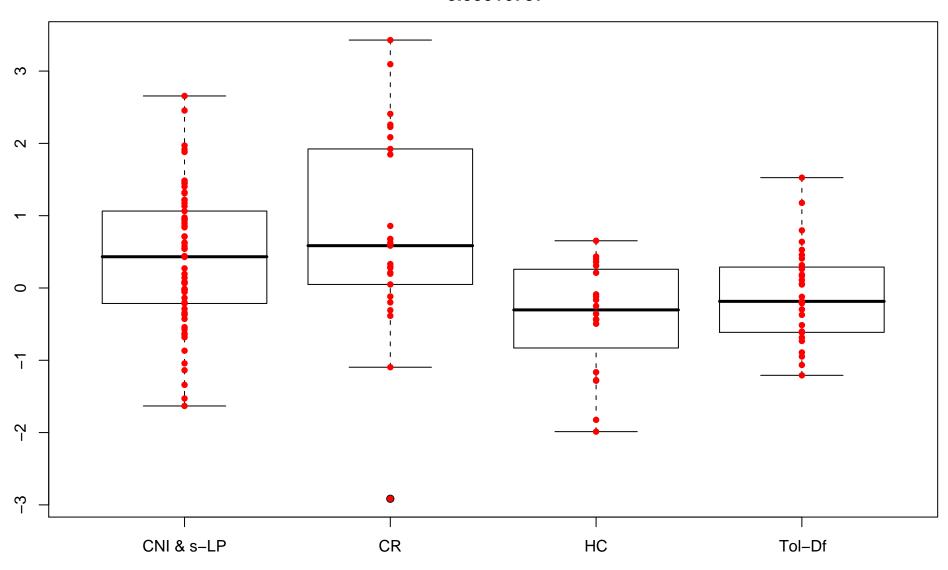
Rank 448 : WHDC1L1 0.0001672



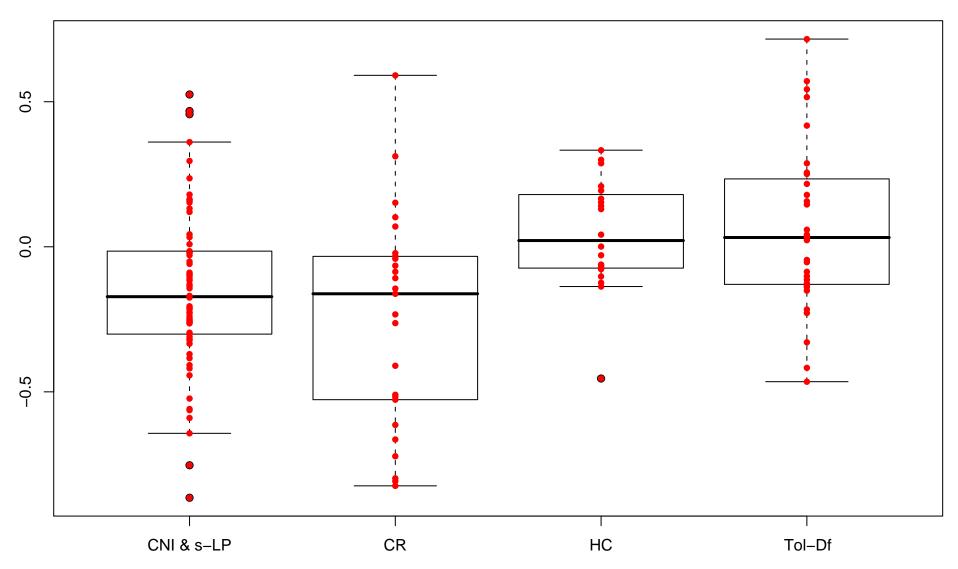
Rank 449 : AKAP8L 0.00016795



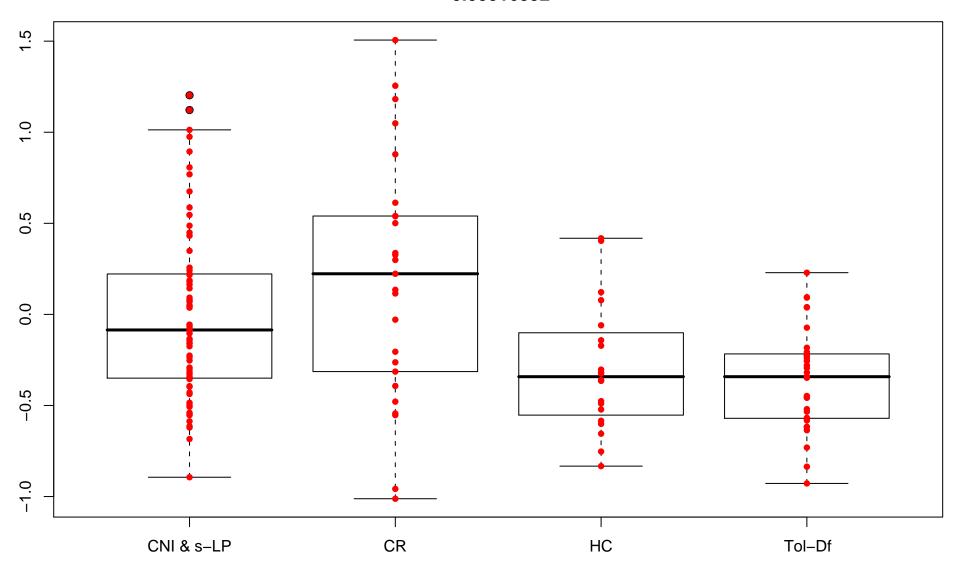
Rank 450 : VSIG4 0.00016797



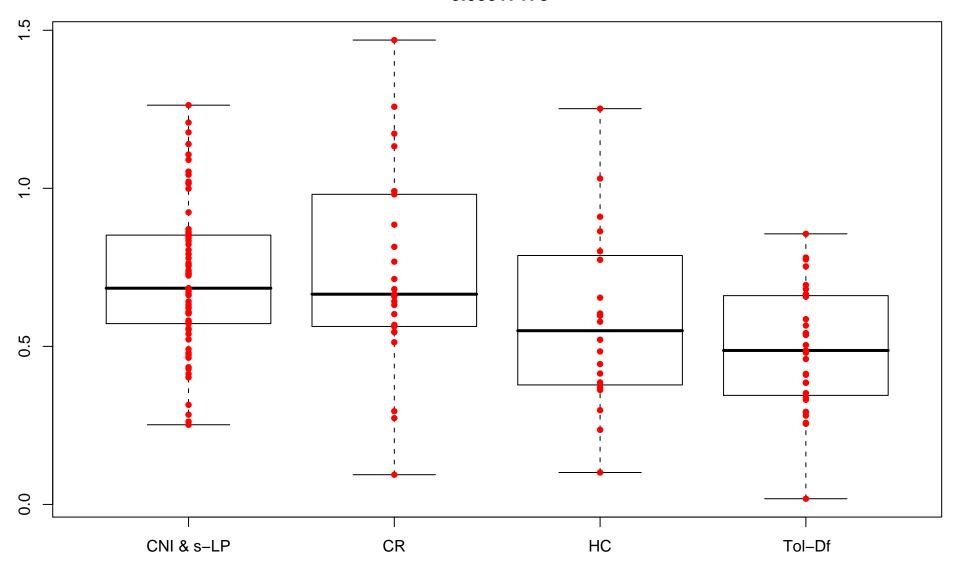
Rank 451 : BZW1 0.00016827



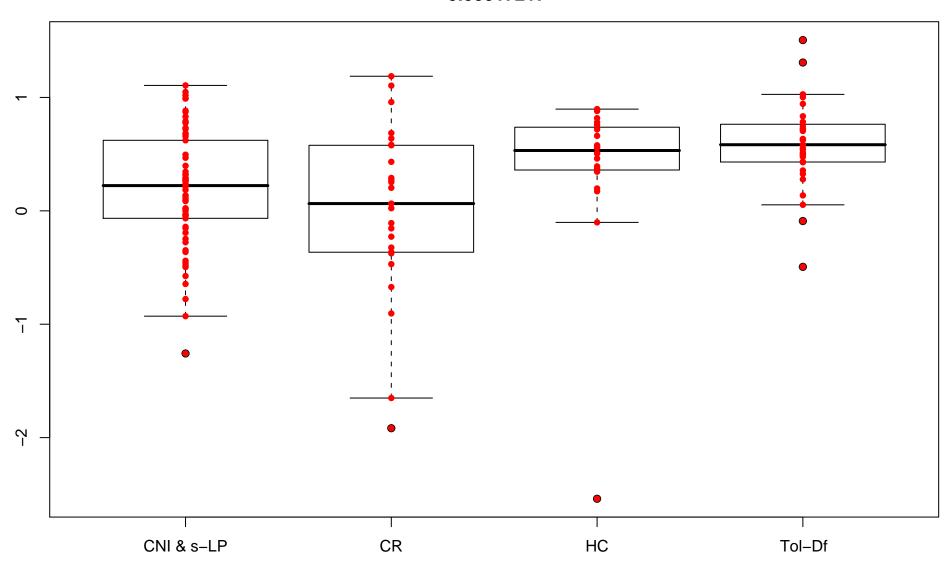
Rank 452 : CREBL2 0.00016892



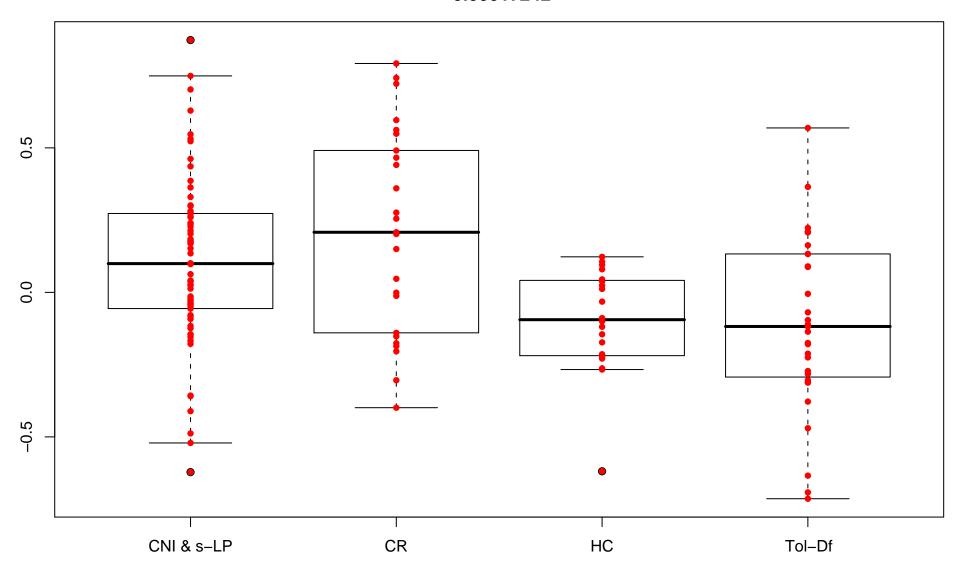
Rank 453 : GRN 0.00017178



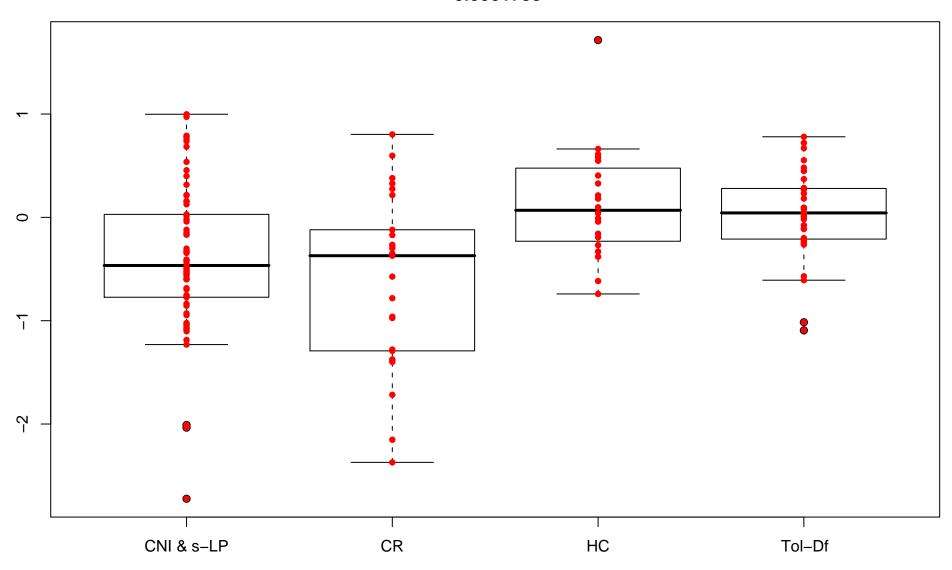
Rank 454 : PCGF6 0.00017217



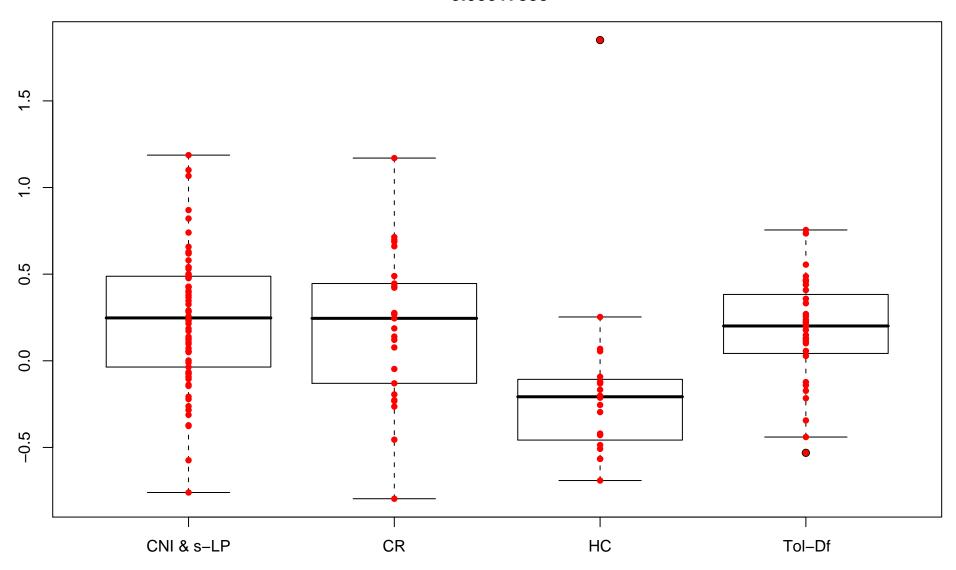
Rank 455 : LMO2 0.00017242



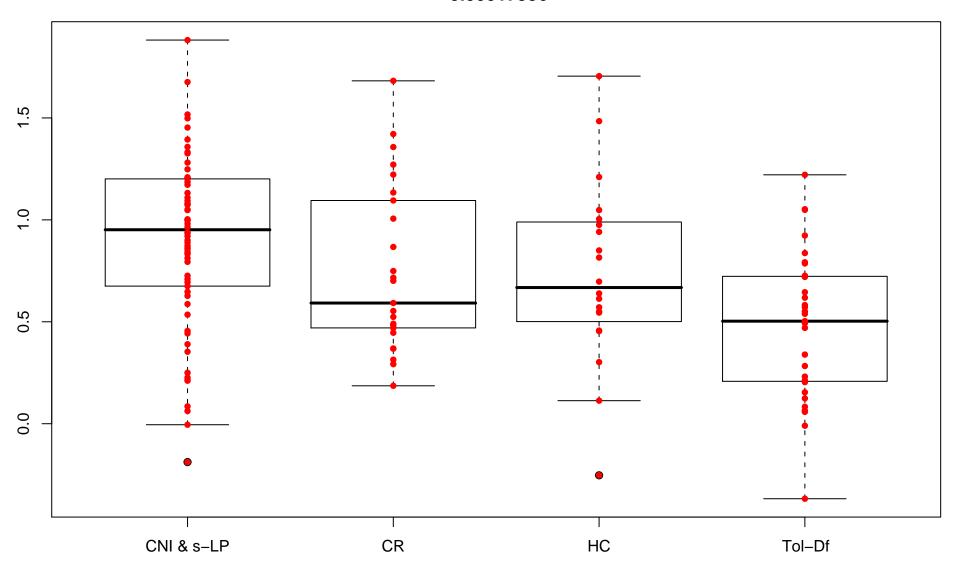
Rank 456 : IQCK 0.0001733



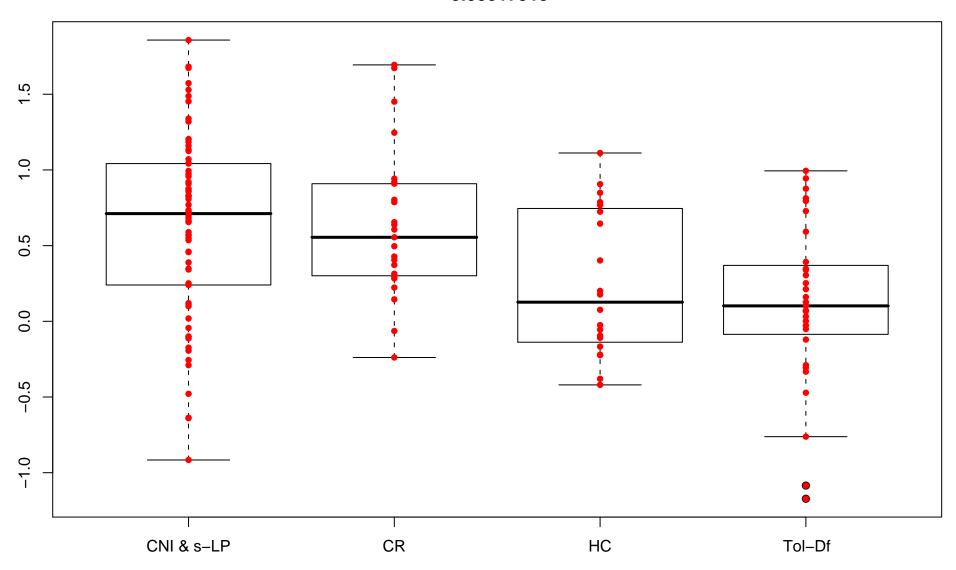
Rank 457 : KIF1C 0.00017399



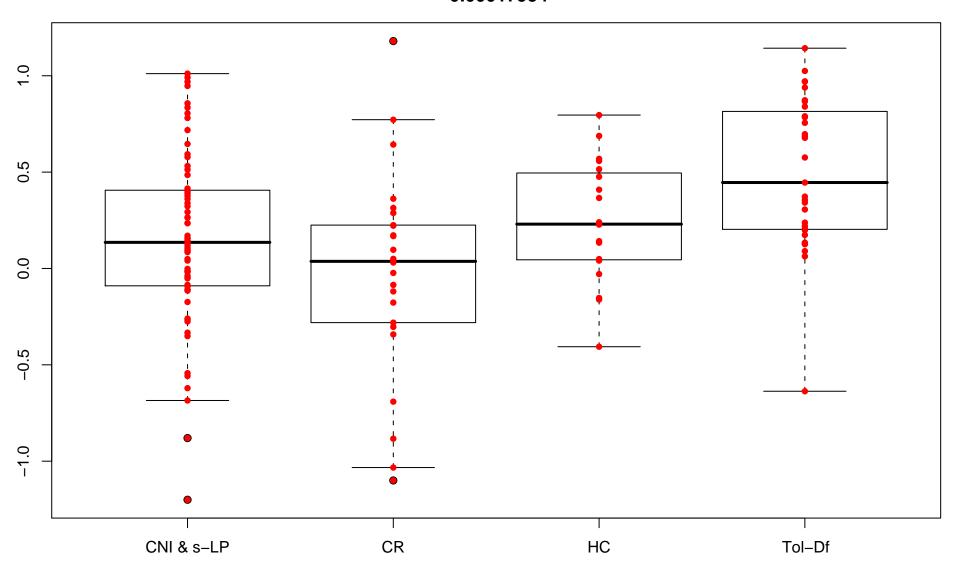
Rank 458 : KIF3C 0.00017556



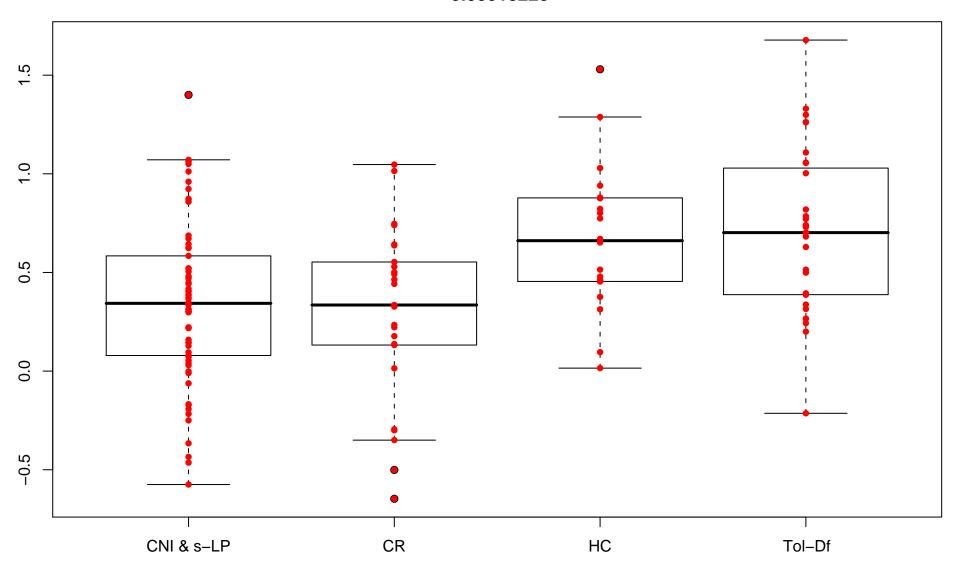
Rank 459 : PLAU 0.00017919



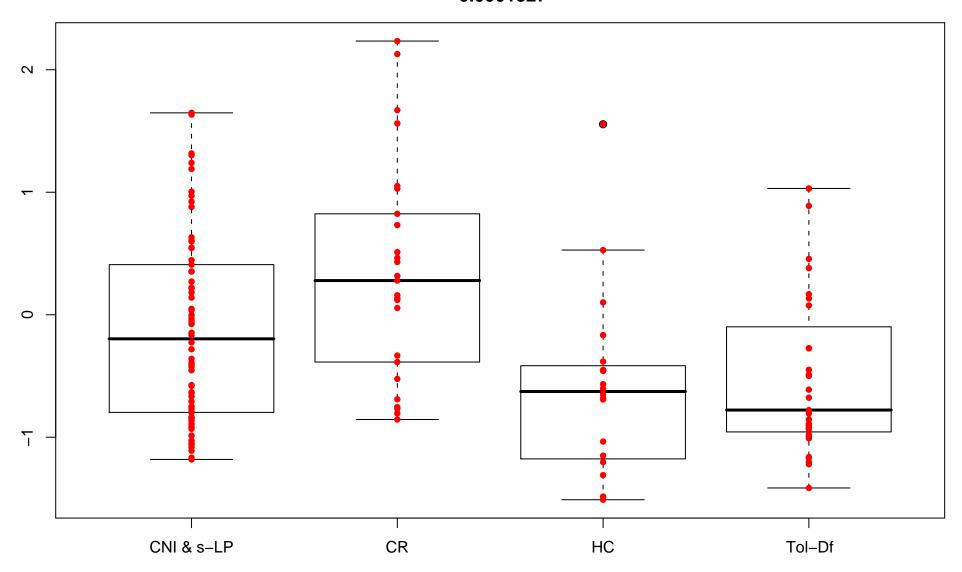
Rank 460 : FYN 0.00017954



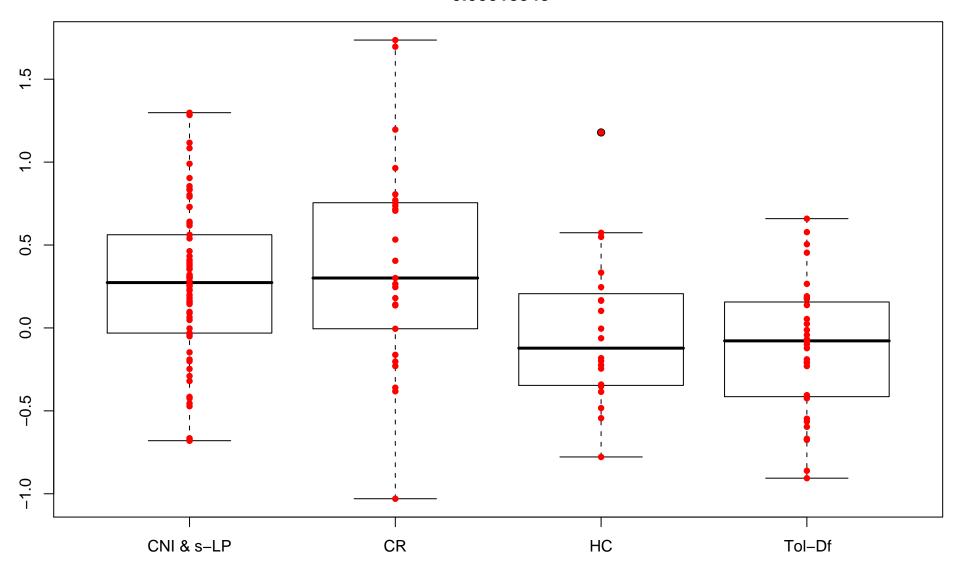
Rank 461 : HEATR1 0.00018228



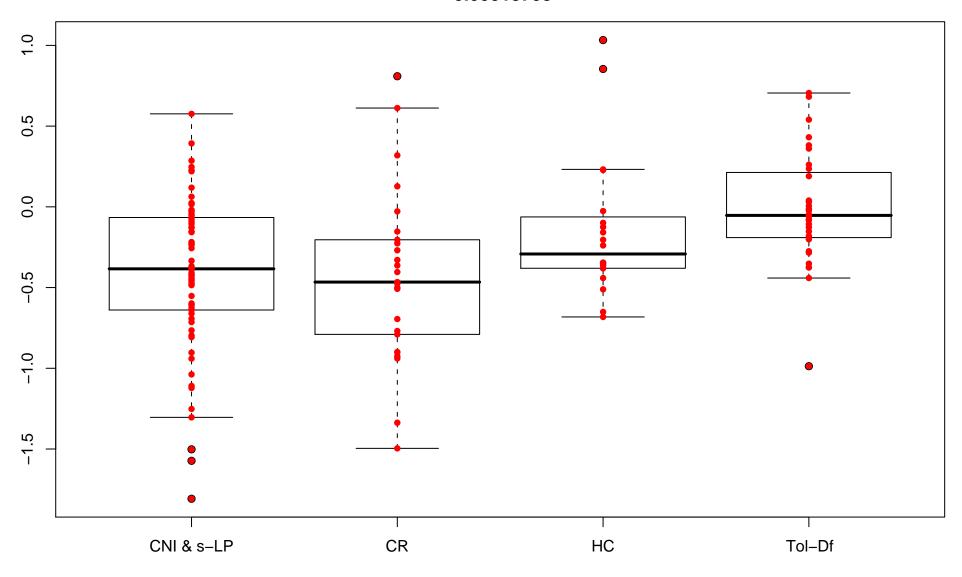
Rank 462 : AF113698 0.0001827



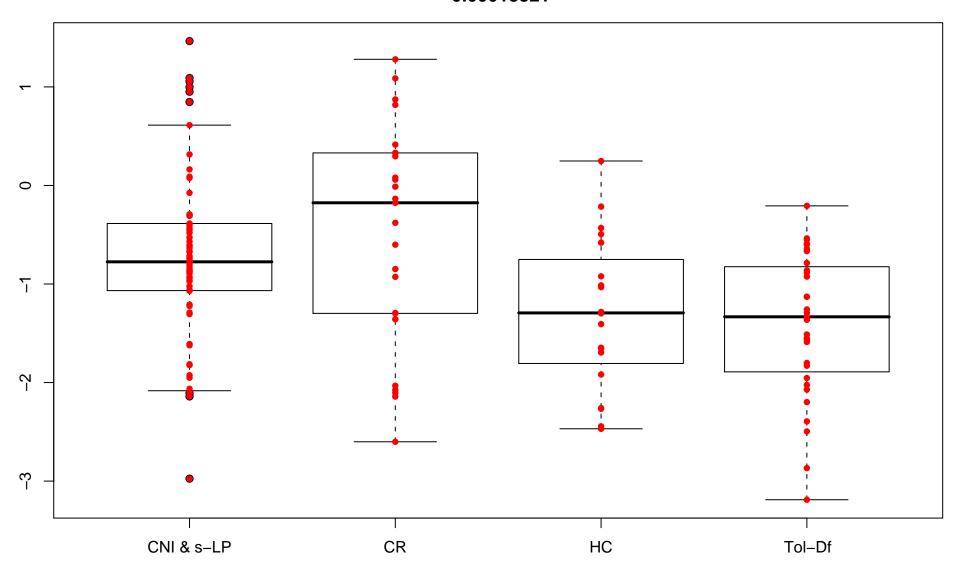
Rank 463 : TCIRG1 0.00018543



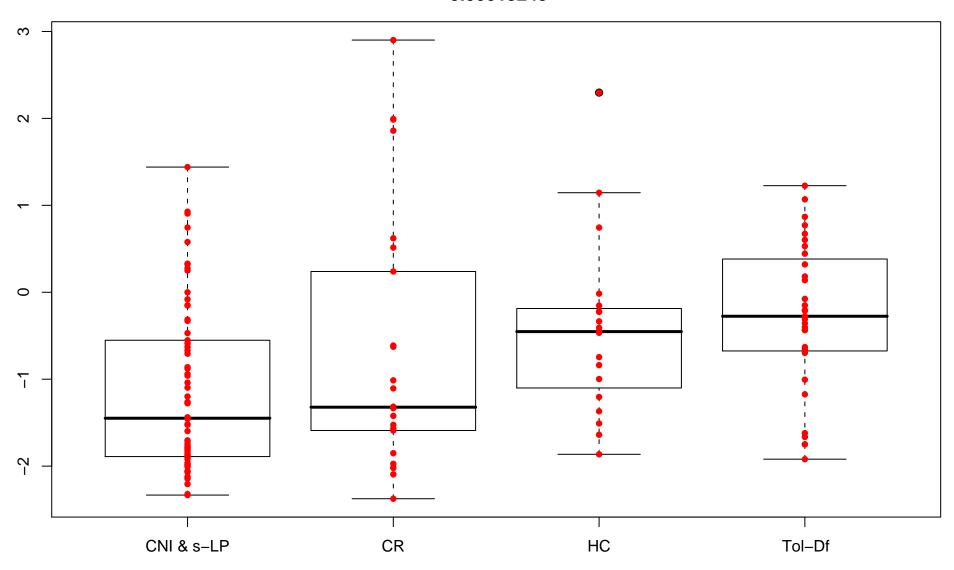
Rank 464 : CLCF1 0.00018708



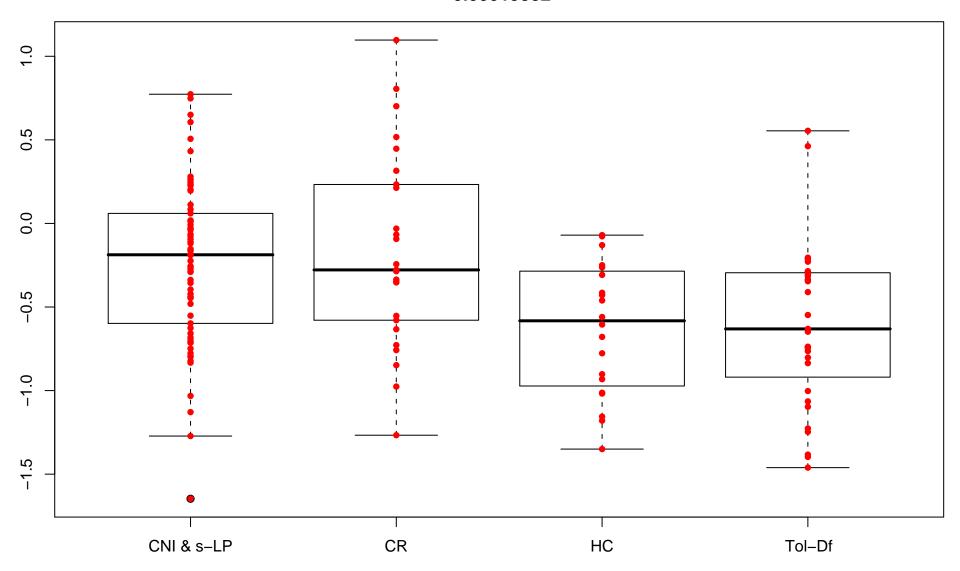
Rank 465 : KLF1 0.00018821



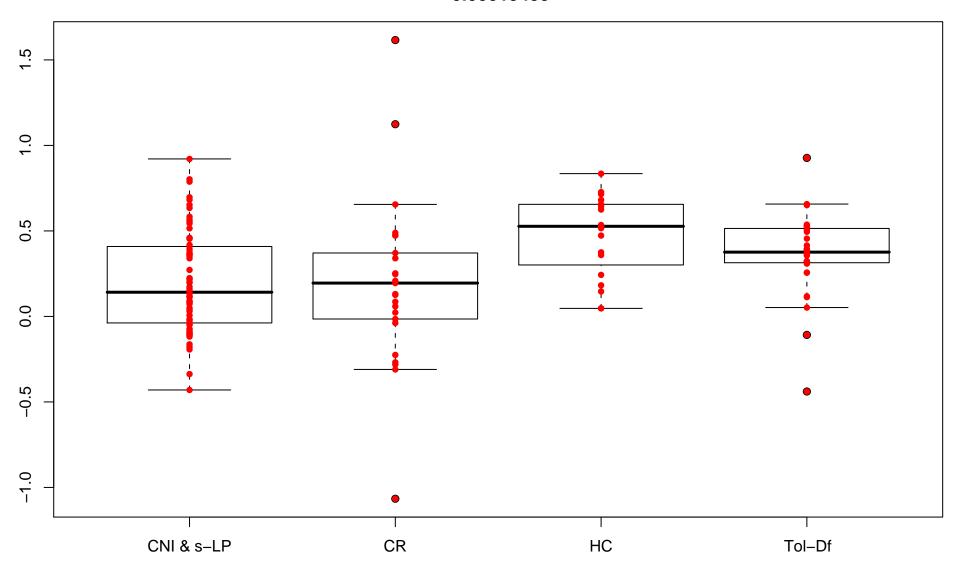
Rank 466 : MGC24039 0.00019249



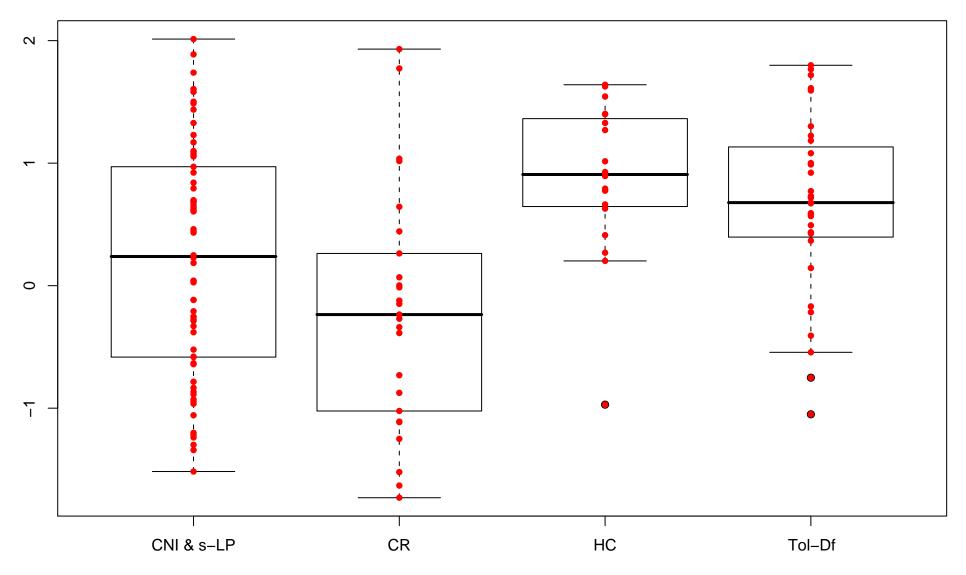
Rank 467: NFE2 0.00019352



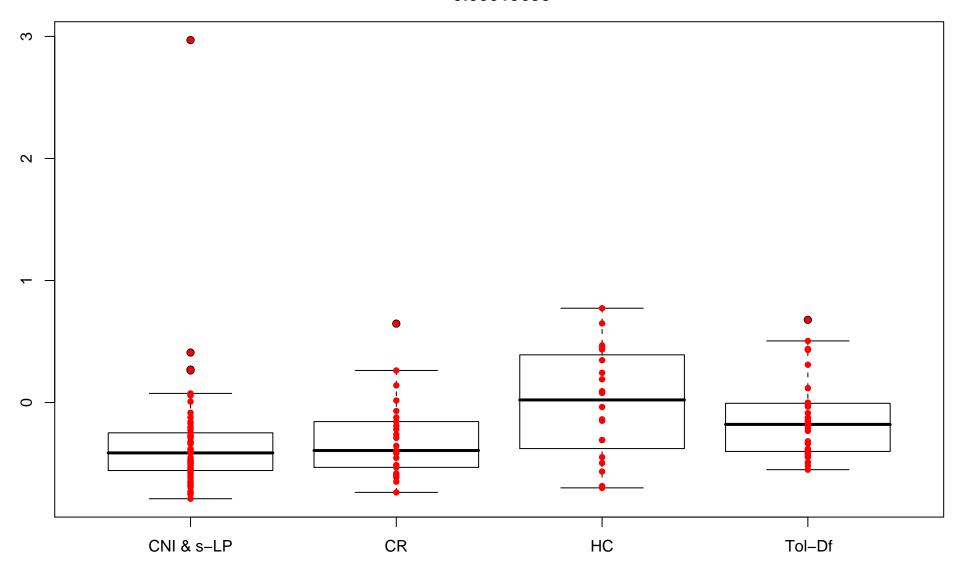
Rank 468 : PFKM 0.00019439



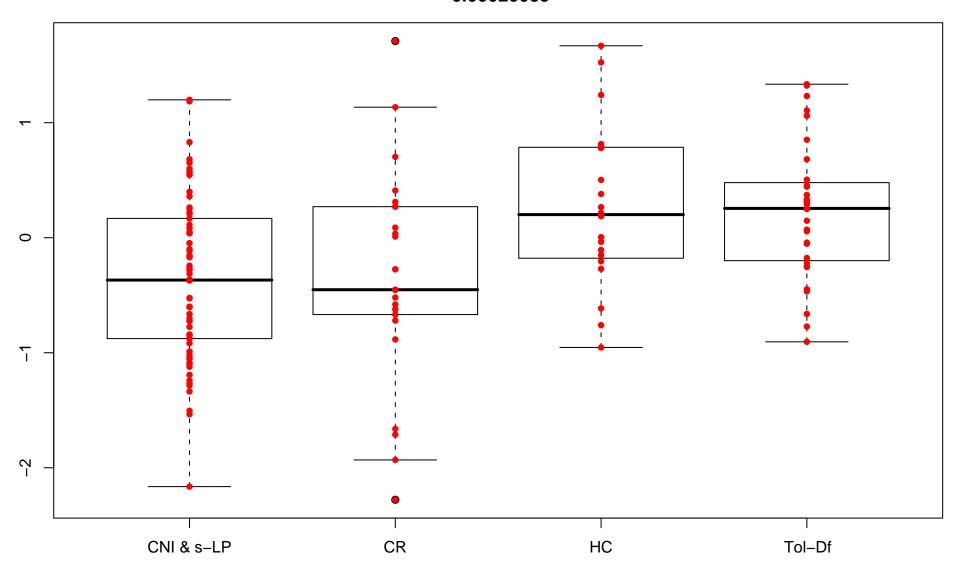
Rank 469 : PLCL1 0.00019563



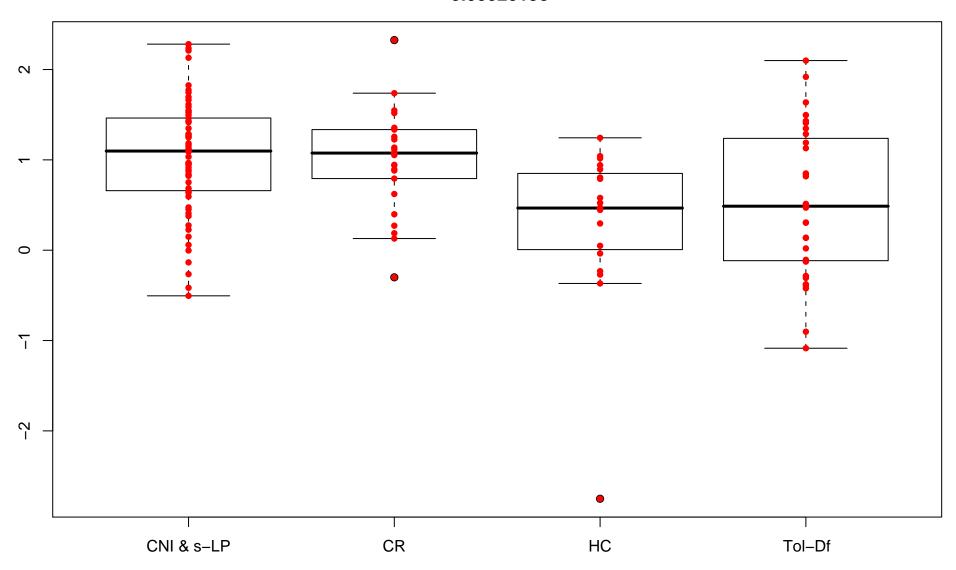
Rank 470 : CCR8 0.00019653



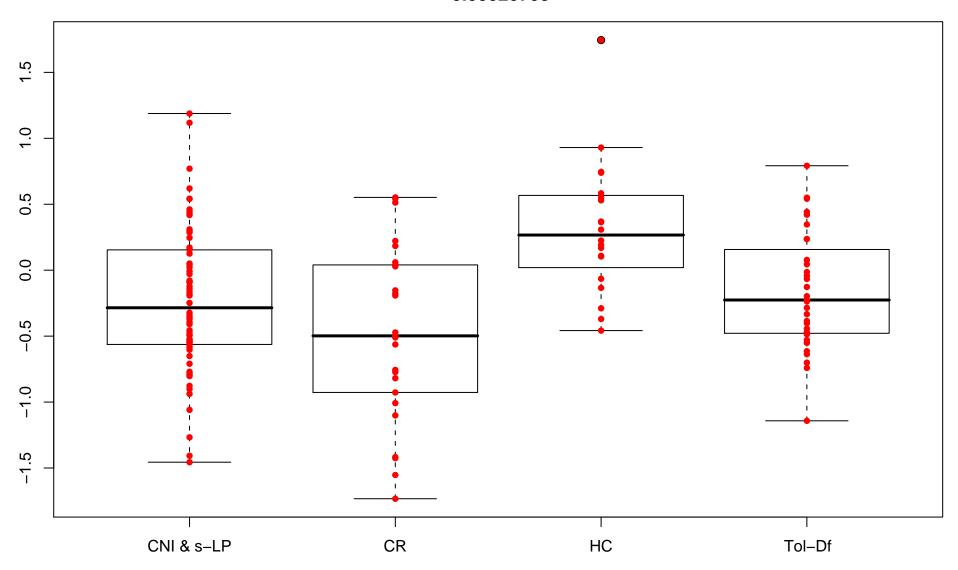
Rank 471 : CKB 0.00020039



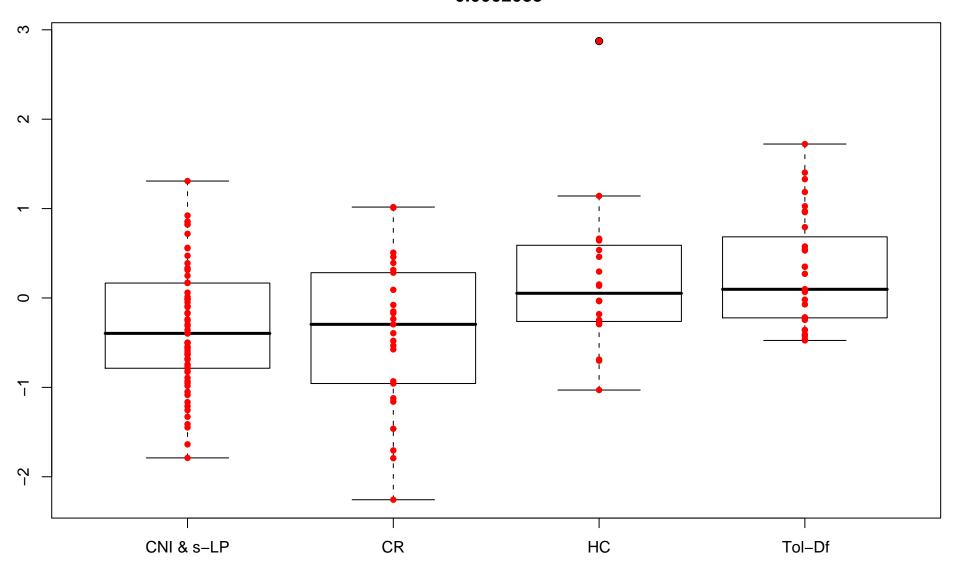
Rank 472 : FLJ30277 0.00020198



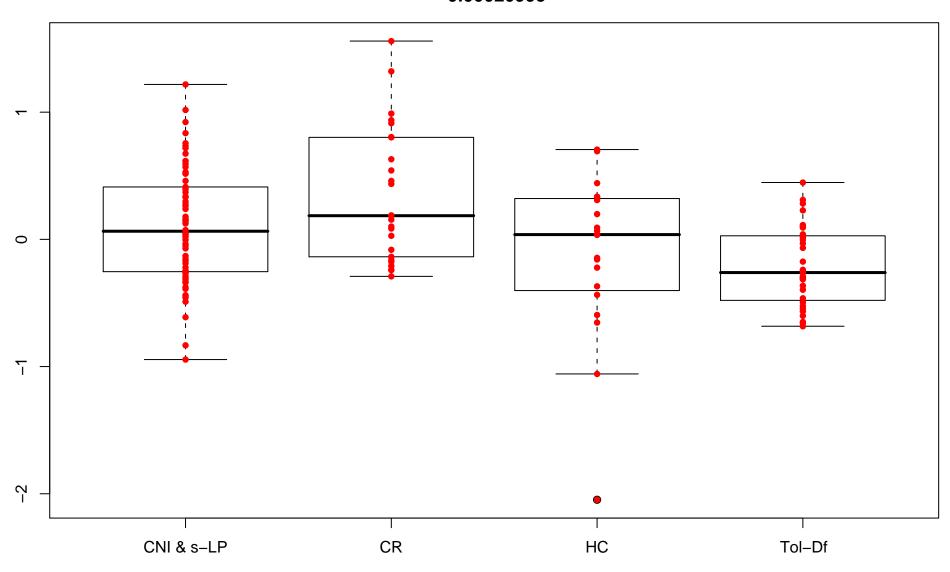
Rank 473 : C20ORF103 0.00020703



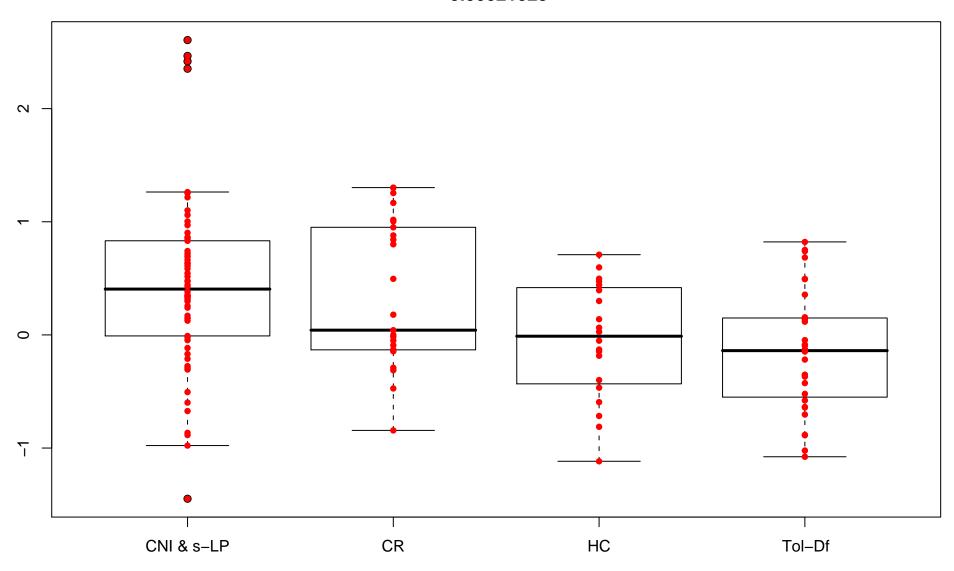
Rank 474 : LTB 0.0002085



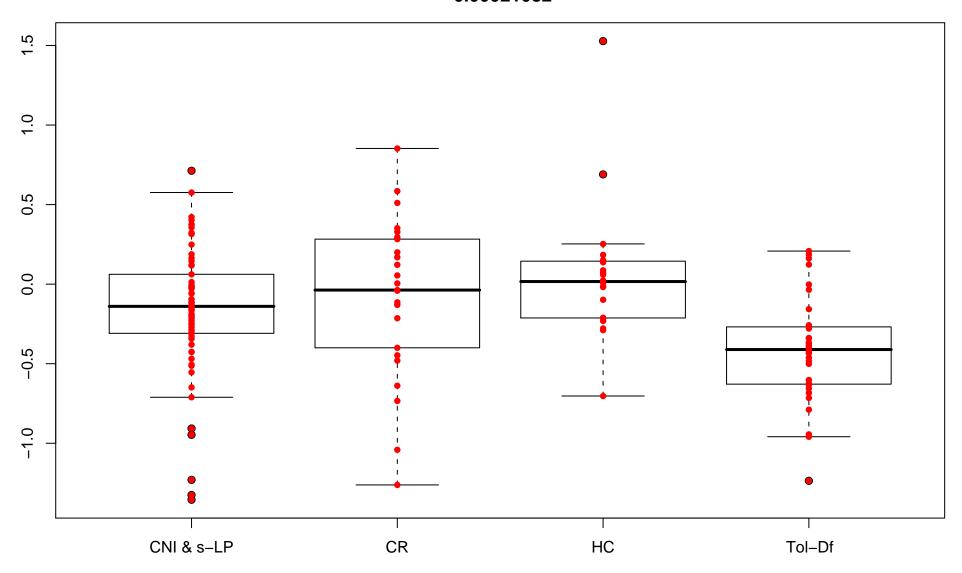
Rank 475 : CHST11 0.00020995



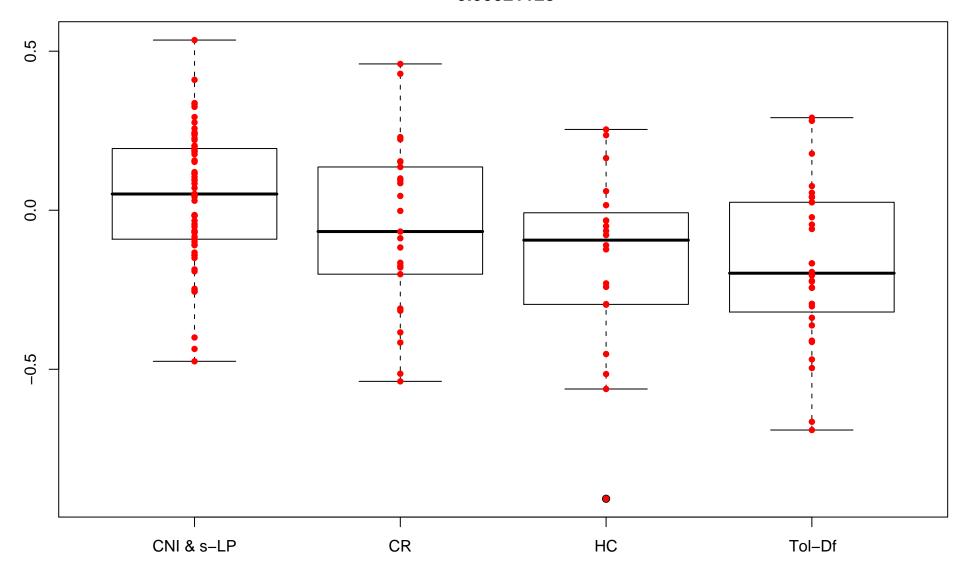
Rank 476 : CEACAM1 0.00021023



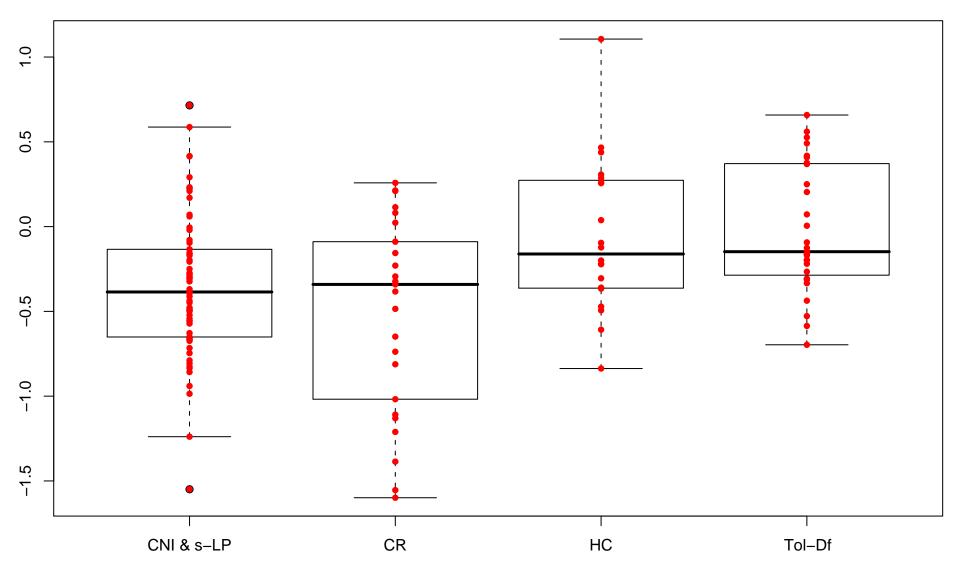
Rank 477 : CALML4 0.00021082



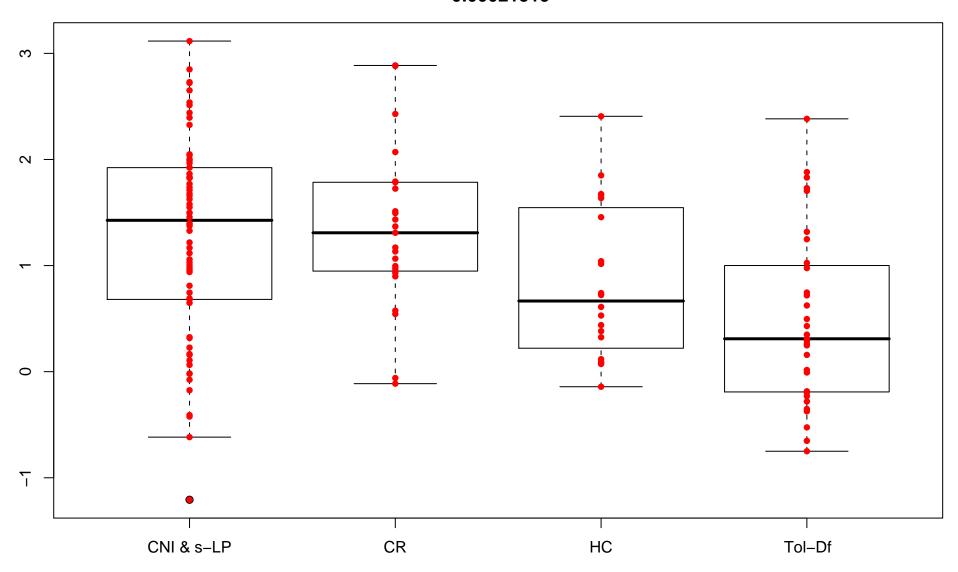
Rank 478 : RBMS1 0.00021128



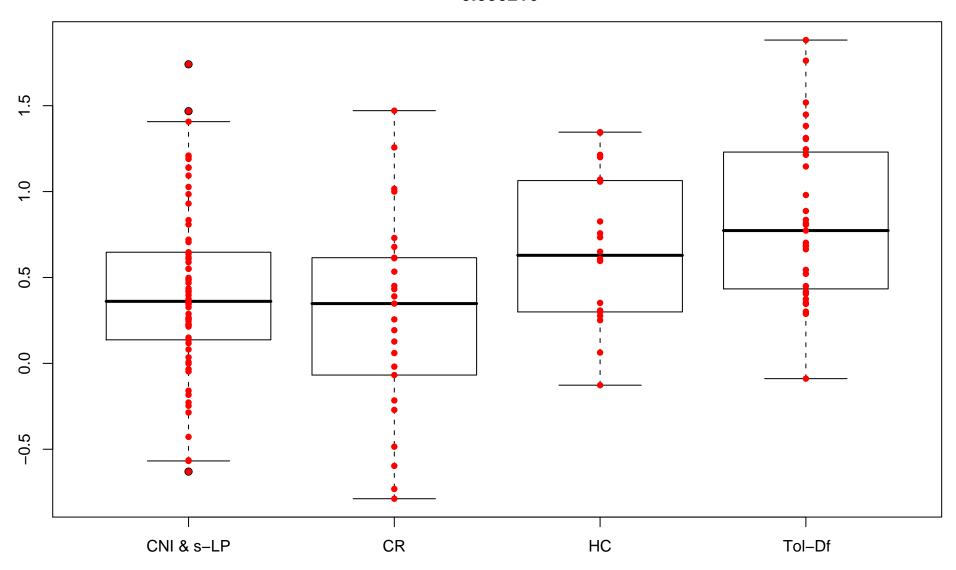
Rank 479 : TFB1M;TIAM2 0.00021392



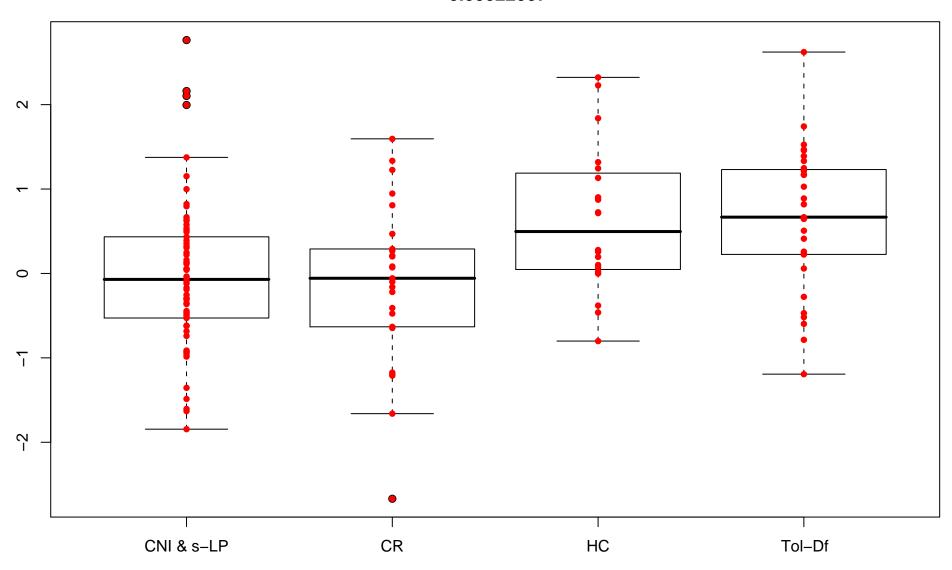
Rank 480 : LOC388210 0.00021519



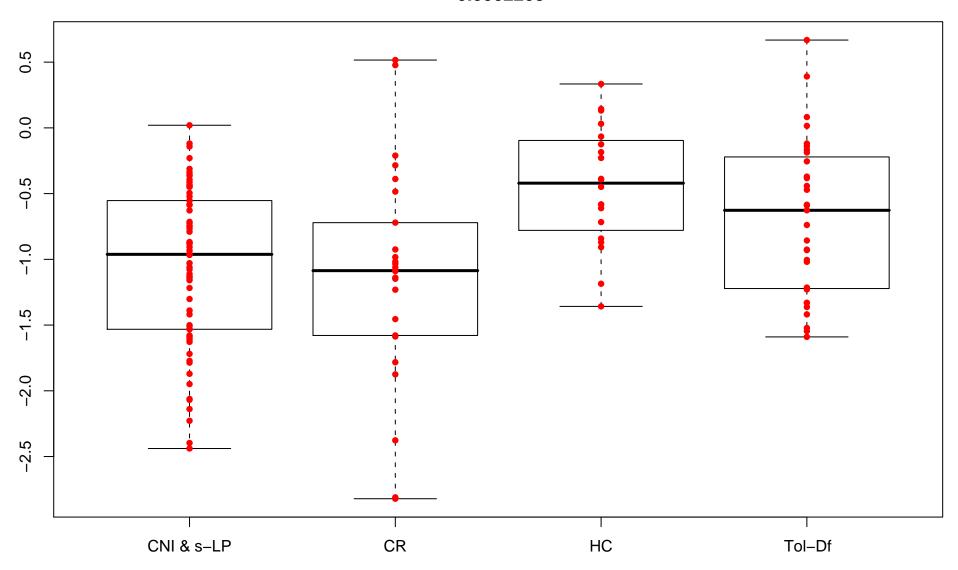
Rank 481 : MCM3 0.000216



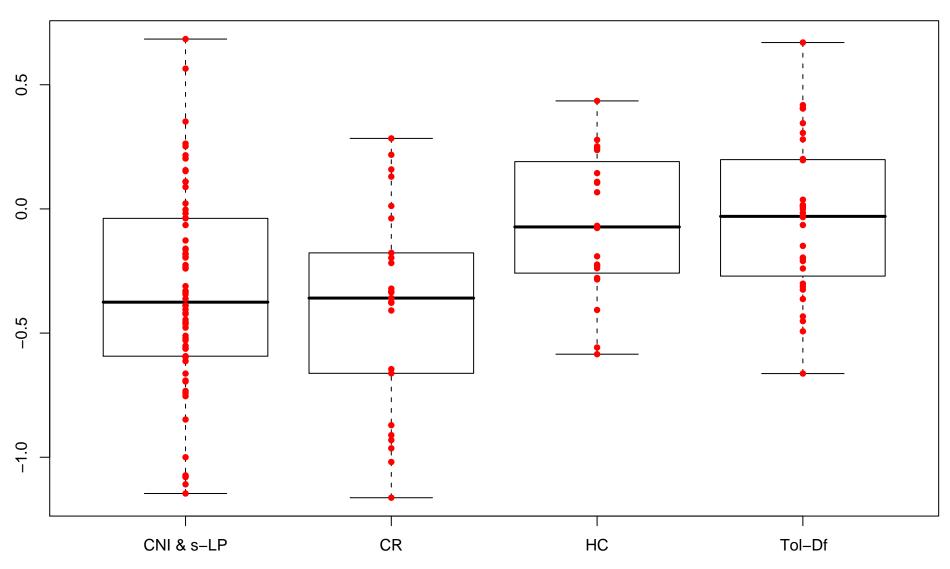
Rank 482 : IGHA1 0.00022007



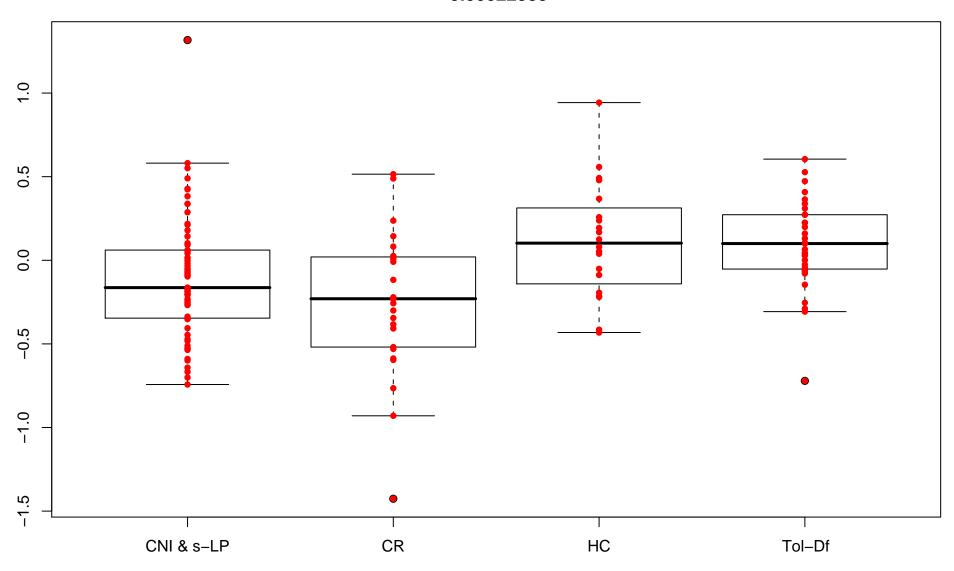
Rank 483 : IGLV3-19 0.0002203



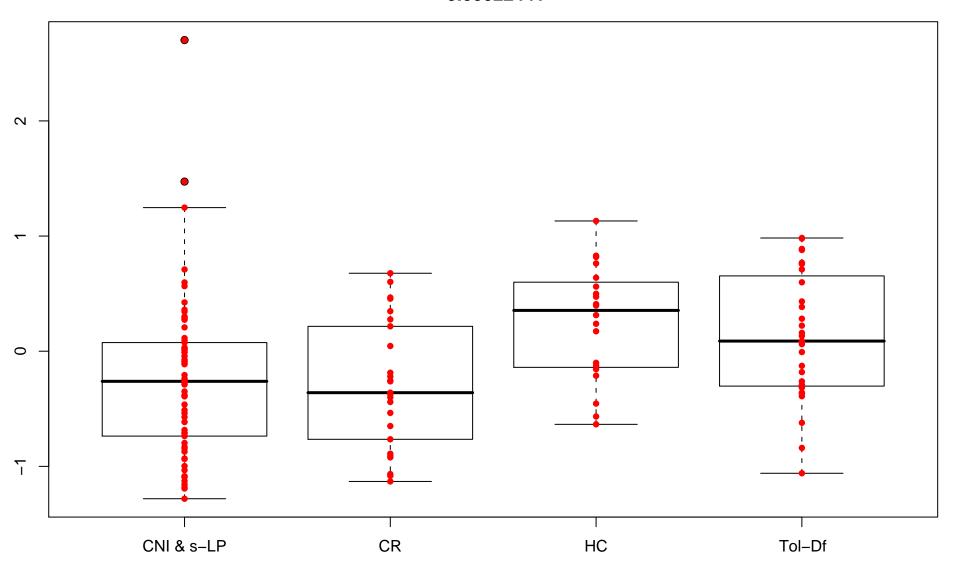
Rank 484 : C1ORF142 0.0002227



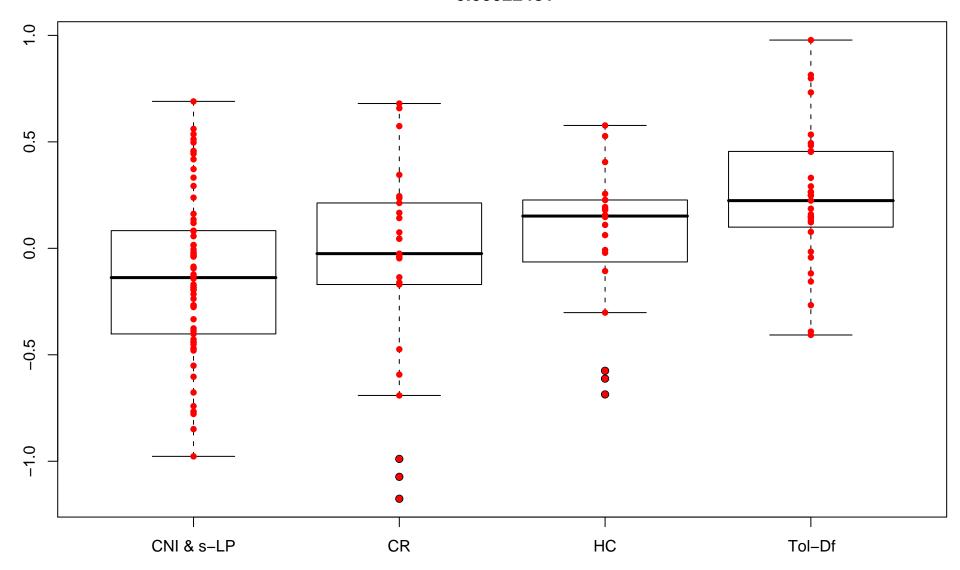
Rank 485 : FANCE 0.00022335



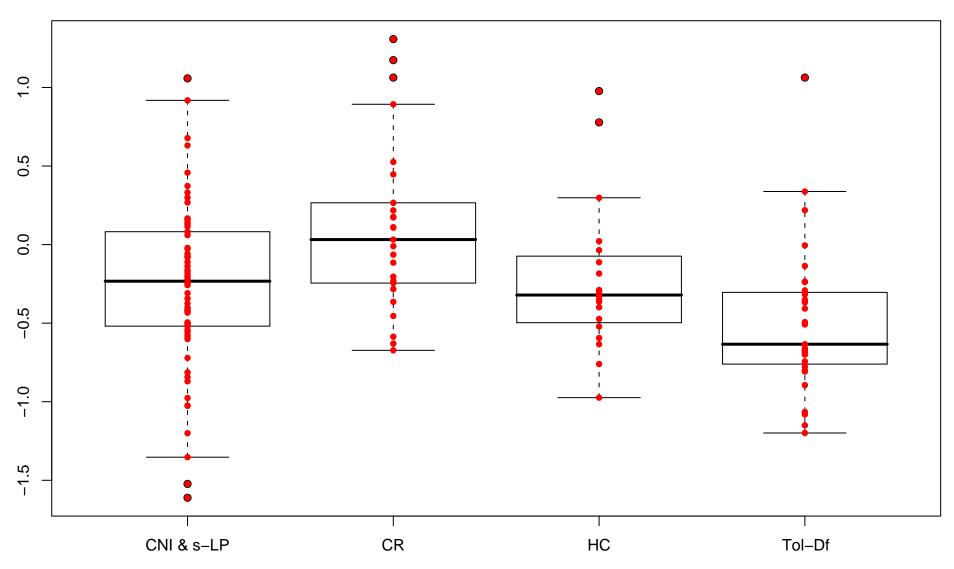
Rank 486 : AK5 0.00022441



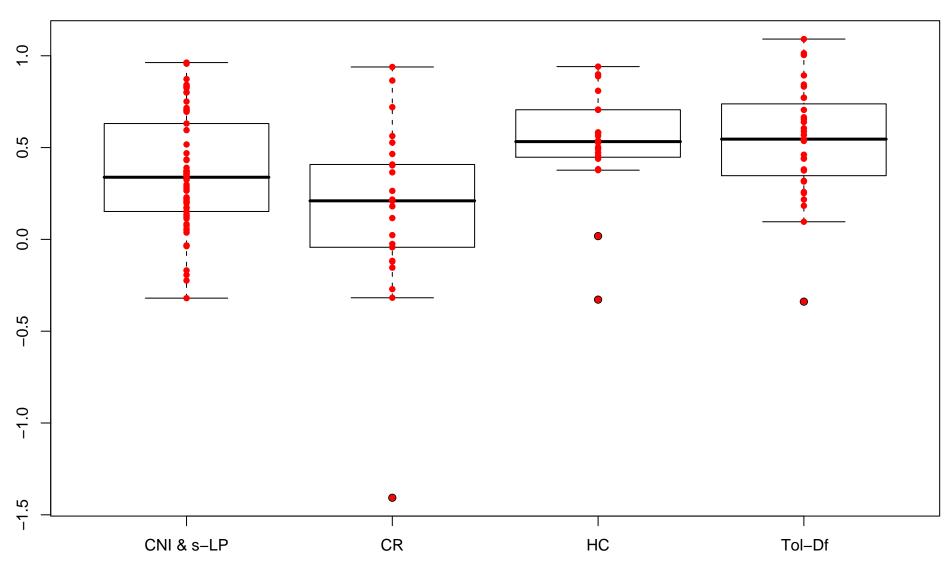
Rank 487 : NAP1L1 0.00022481



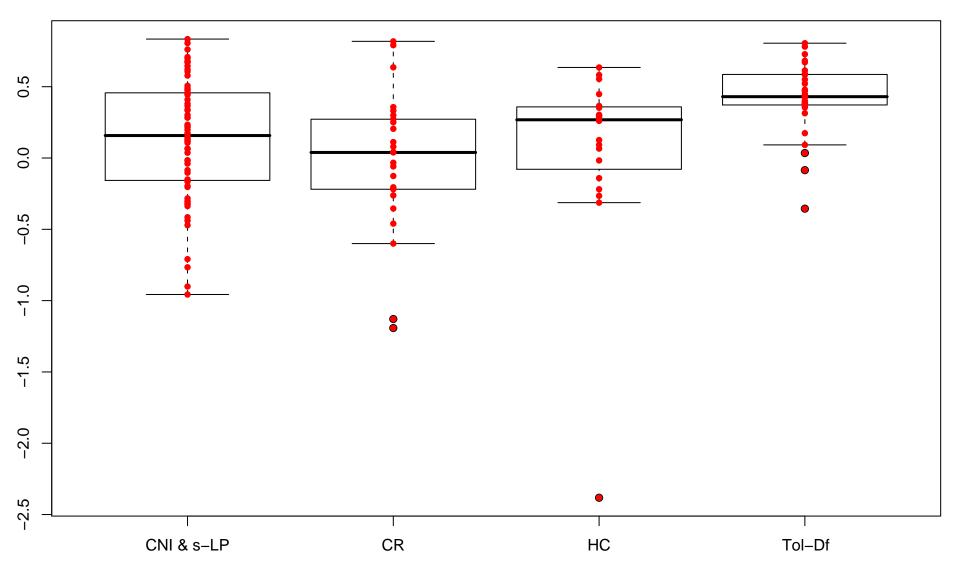
Rank 488 : DDX58 0.00022672



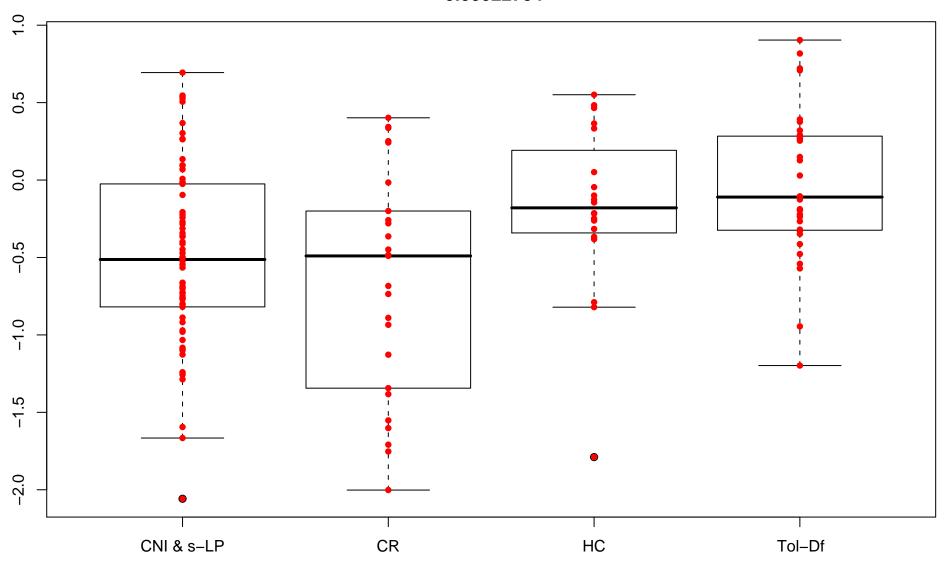
Rank 489 : IRAK2 0.00022704



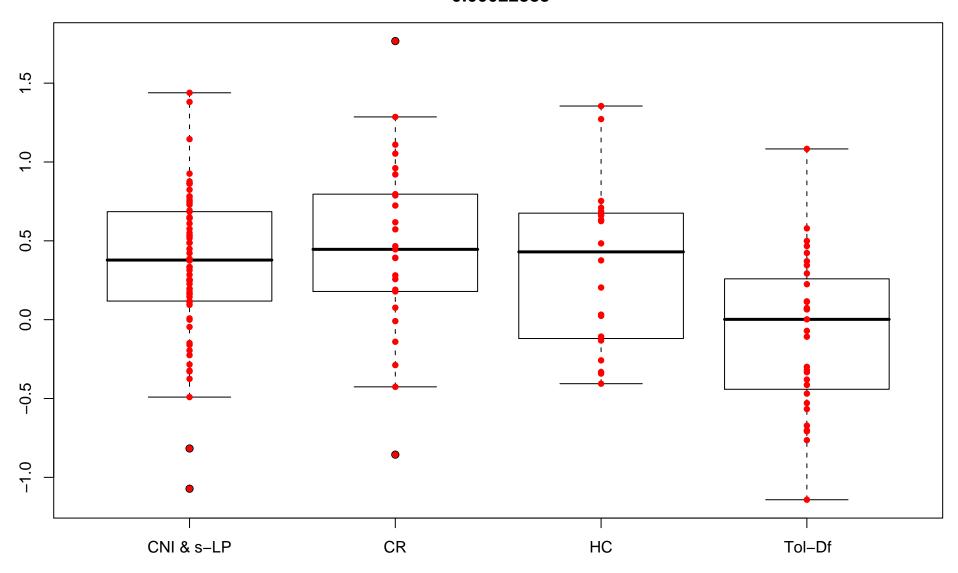
Rank 490 : GARNL1 0.00022709



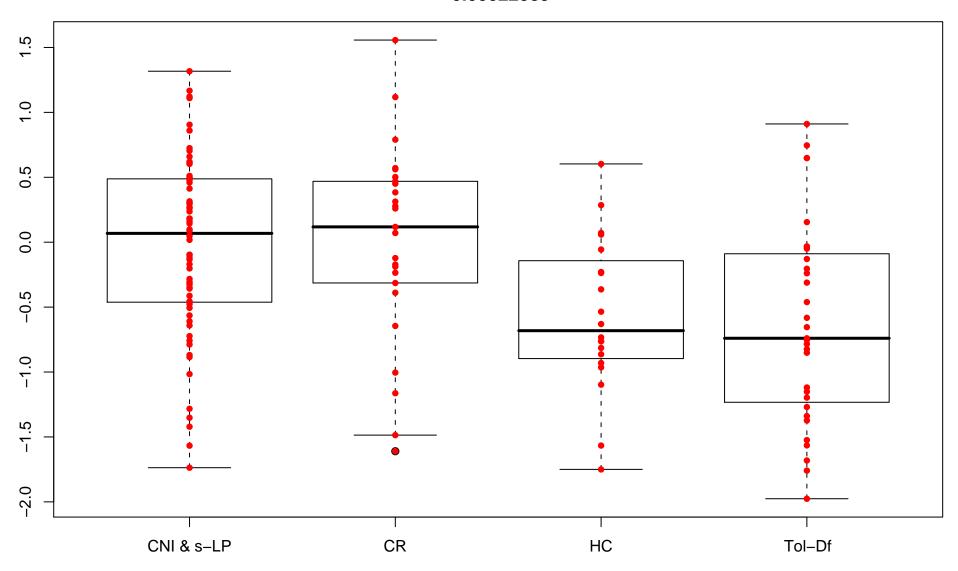
Rank 491 : NARS2 0.00022754



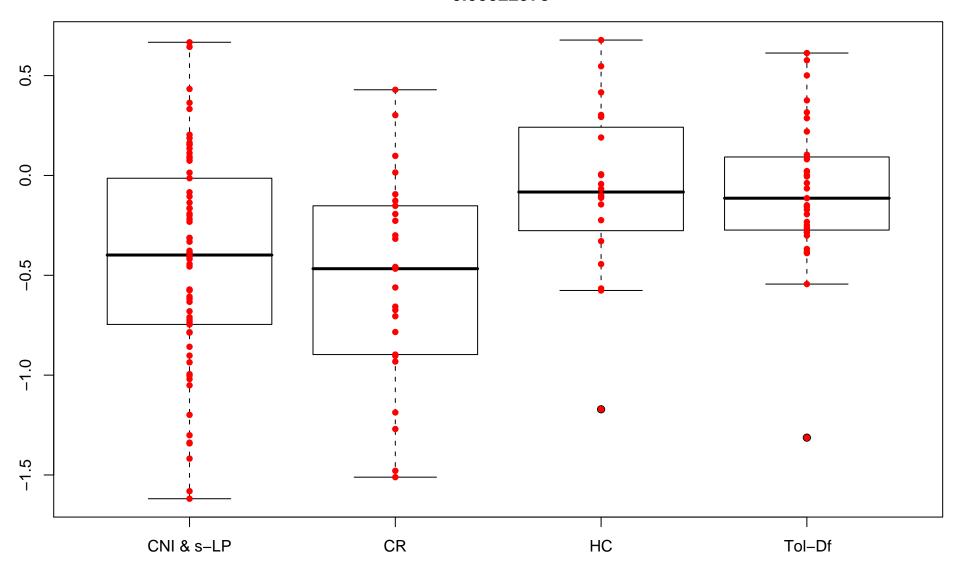
Rank 492 : CSF2RB 0.00022883



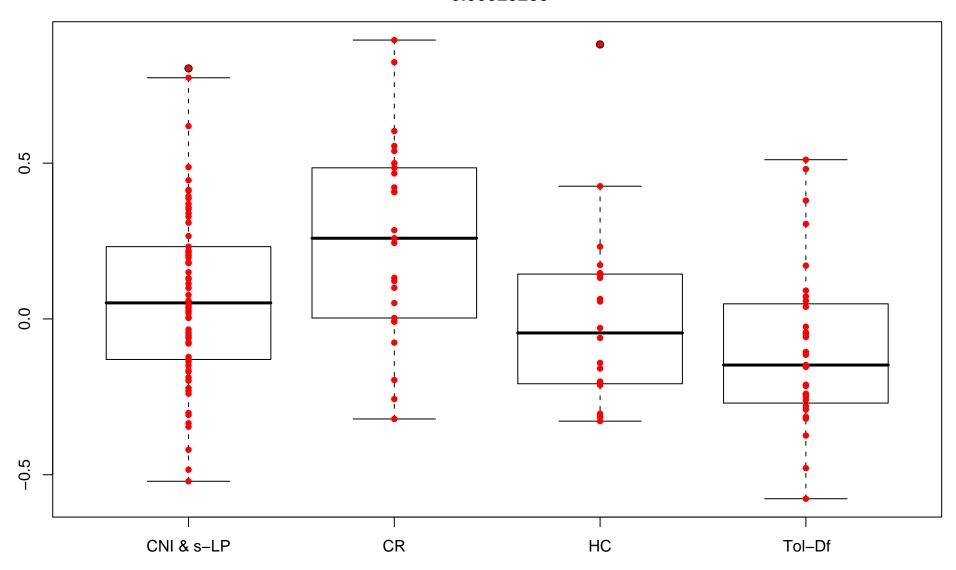
Rank 493 : CASP5 0.00022889



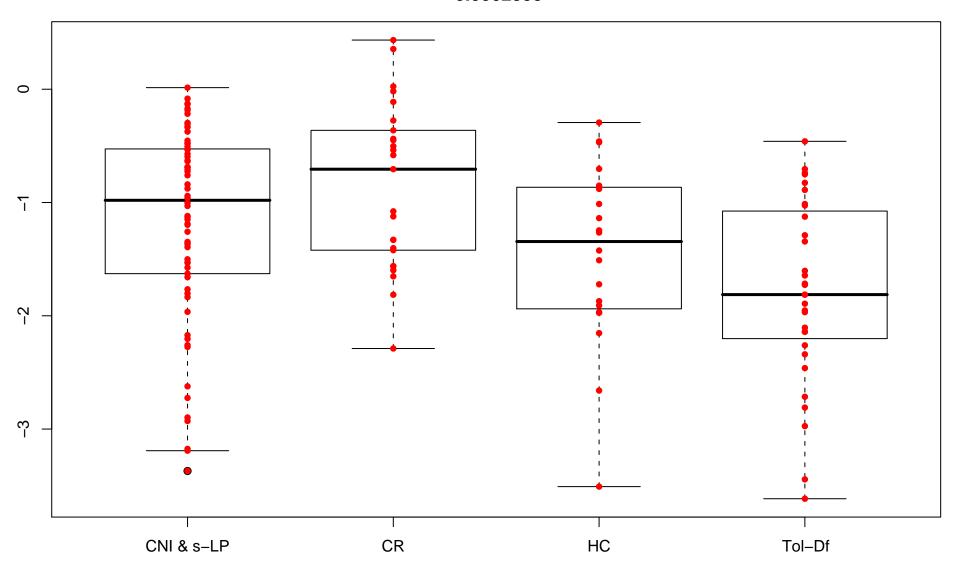
Rank 494 : DIMT1L 0.00022975



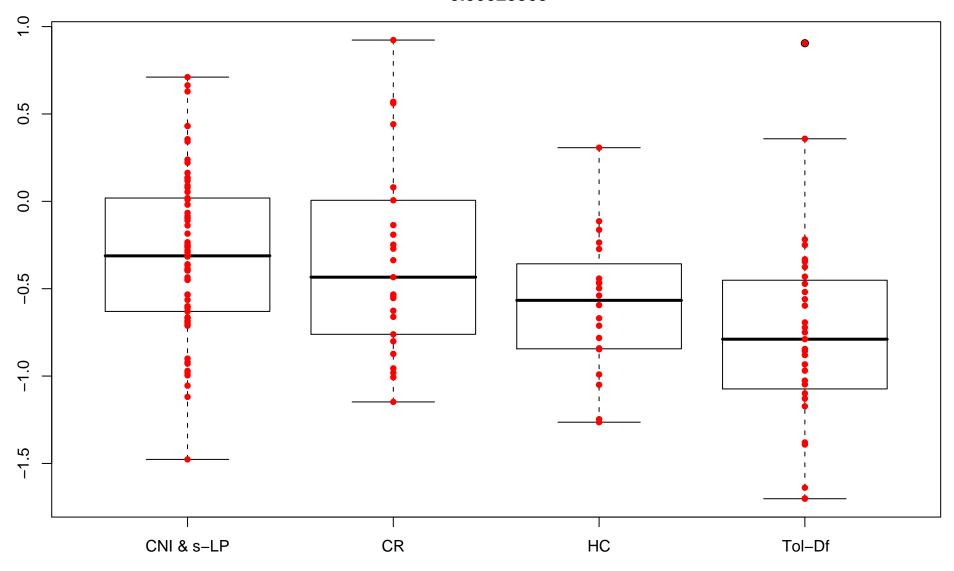
Rank 495 : GNB4 0.00023283



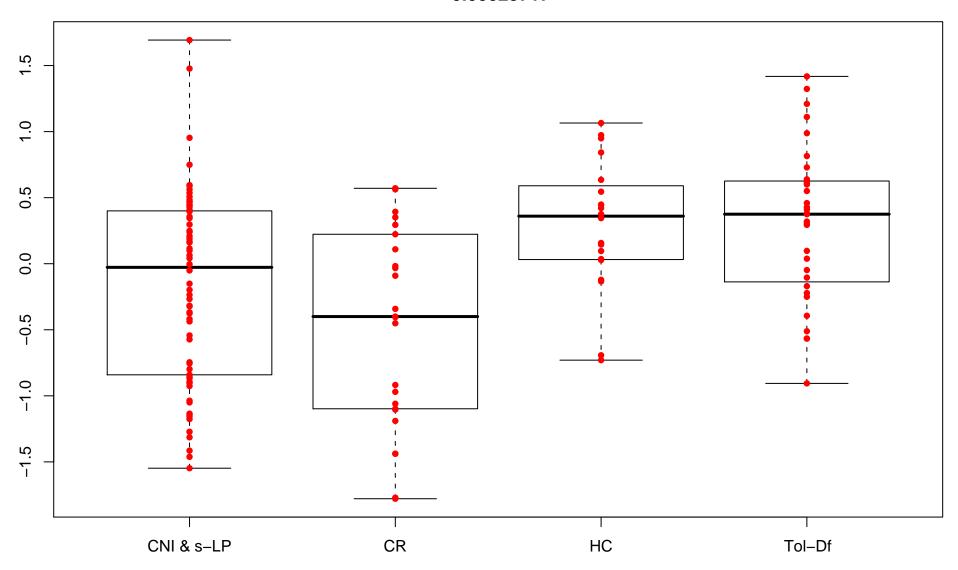
Rank 496 : TNFAIP6 0.0002335



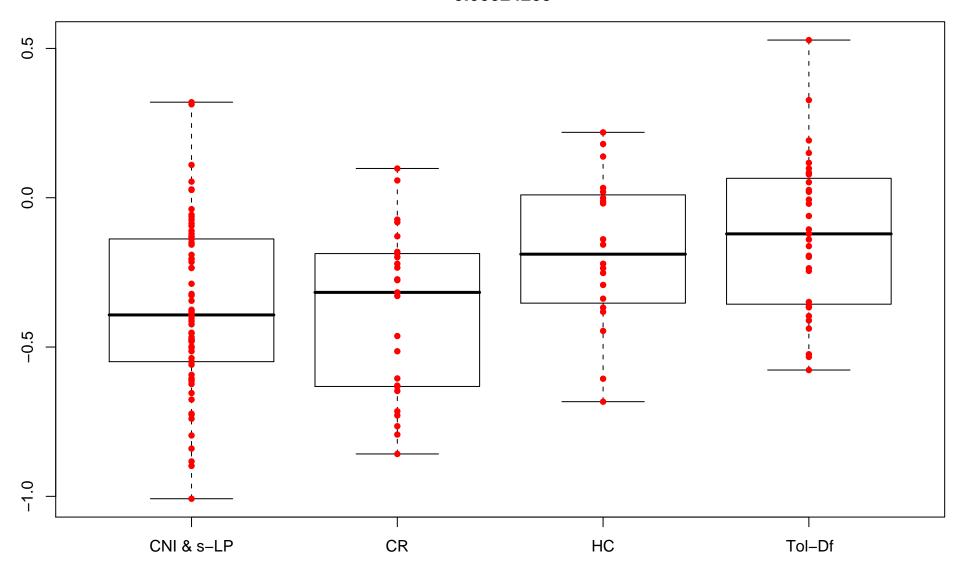
Rank 497 : IL1RN 0.00023505



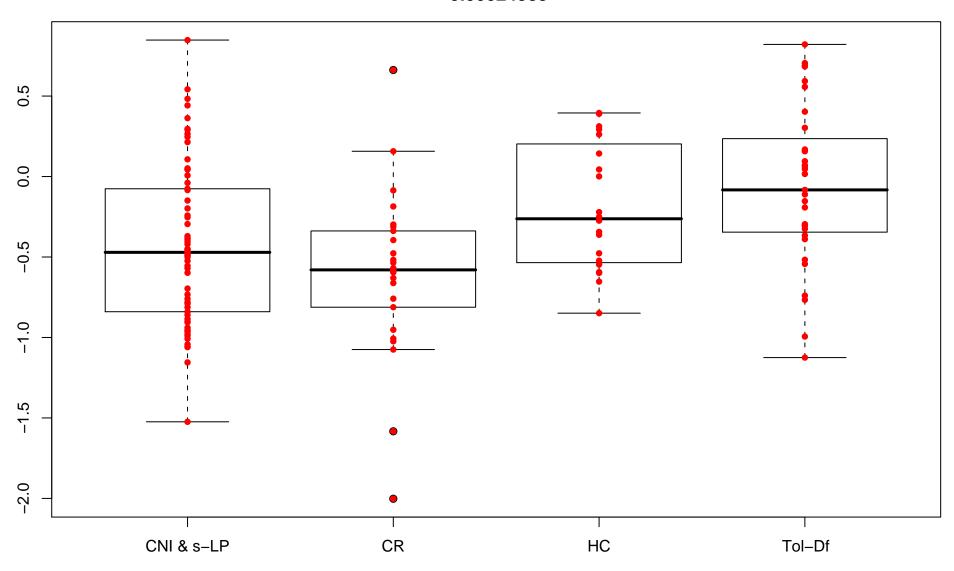
Rank 498 : DFNB59 0.00023717



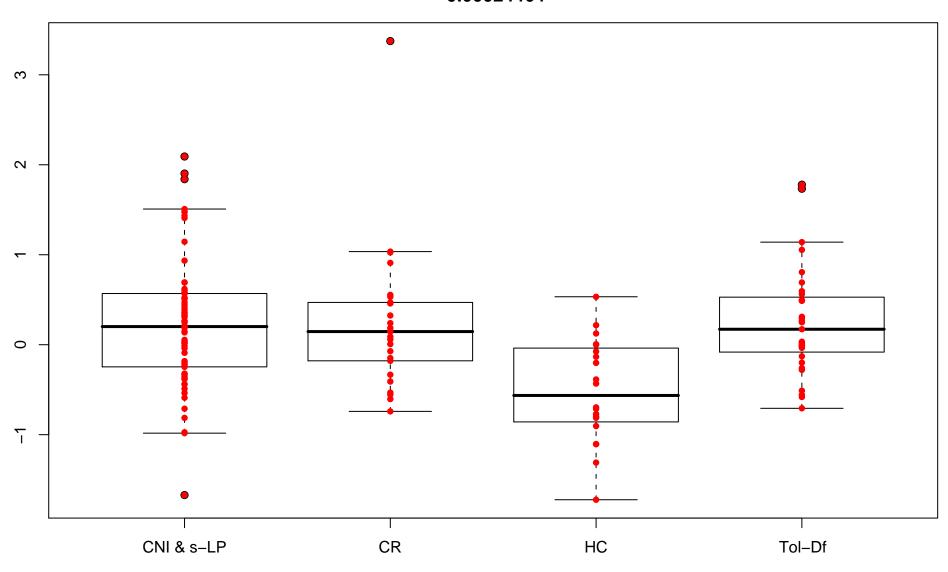
Rank 499 : EXOSC1 0.00024209



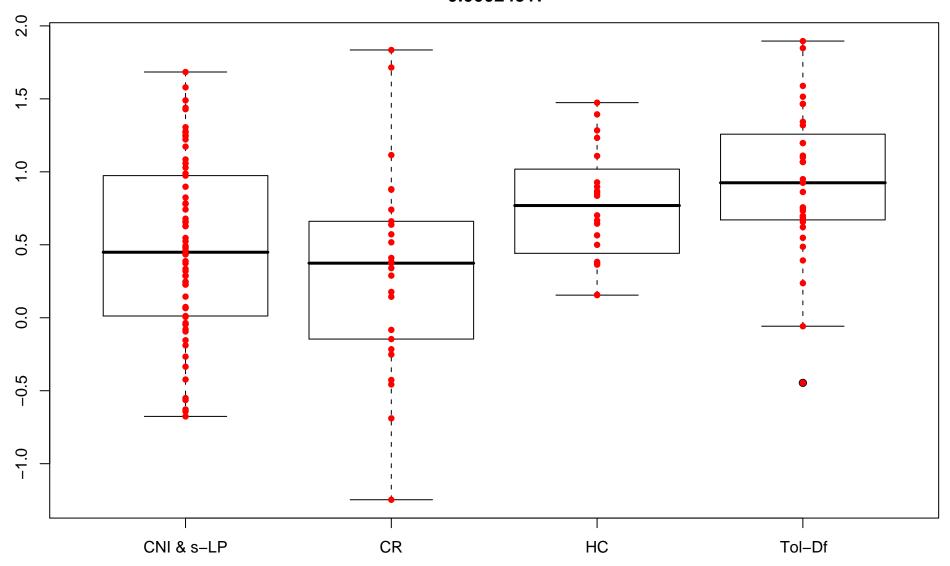
Rank 500 : SLC25A4 0.00024383



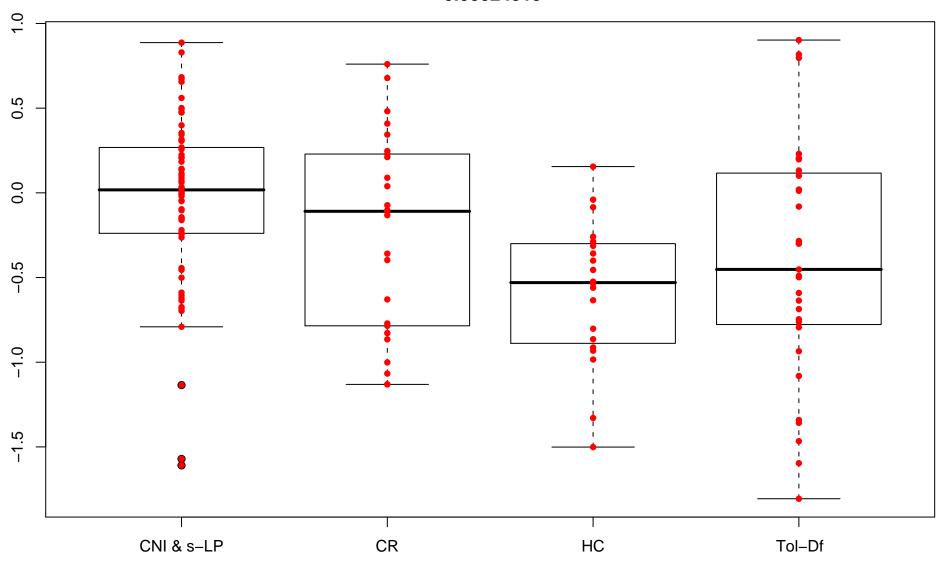
Rank 501 : A\_24\_P492919 0.00024464



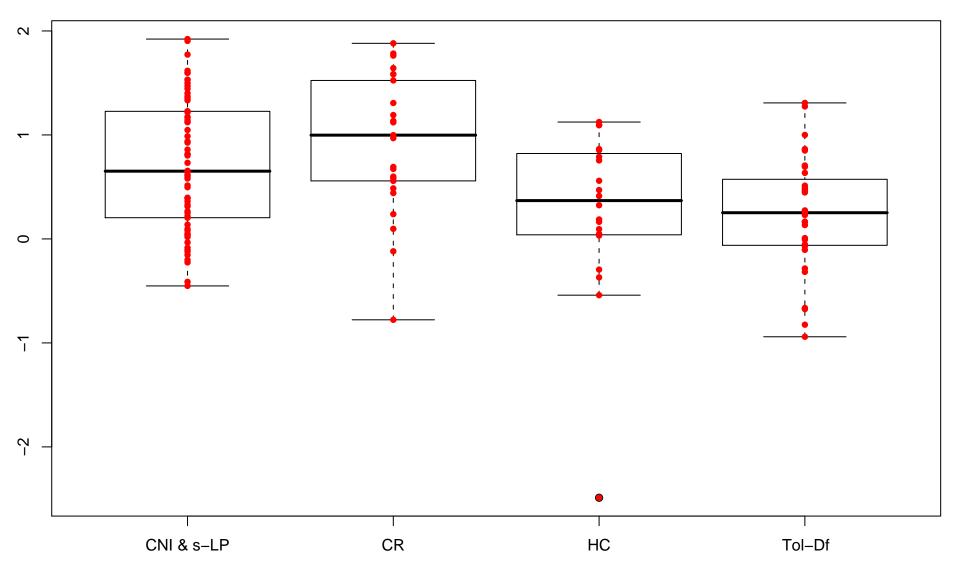
Rank 502 : CARD11 0.00024517



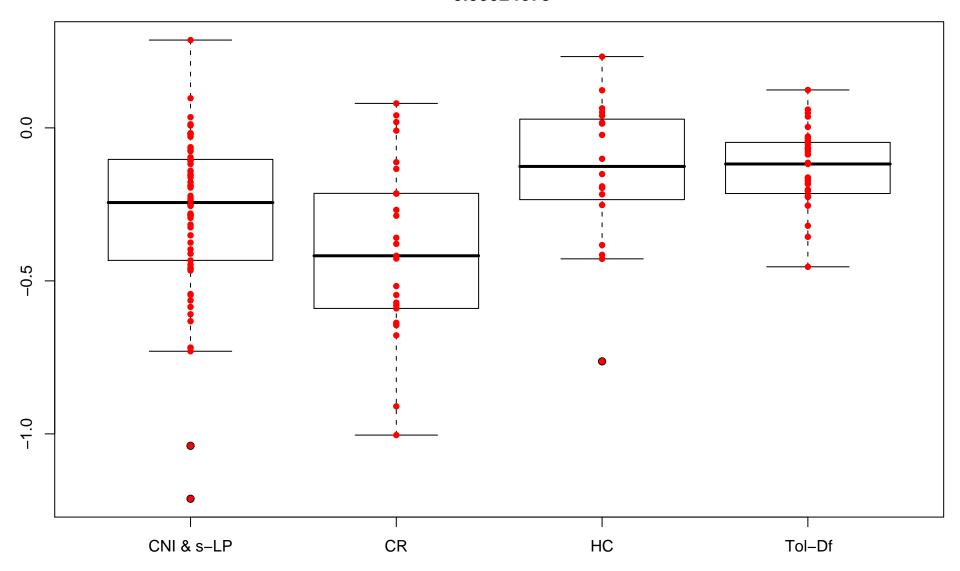
Rank 503 : C1ORF217 0.00024519



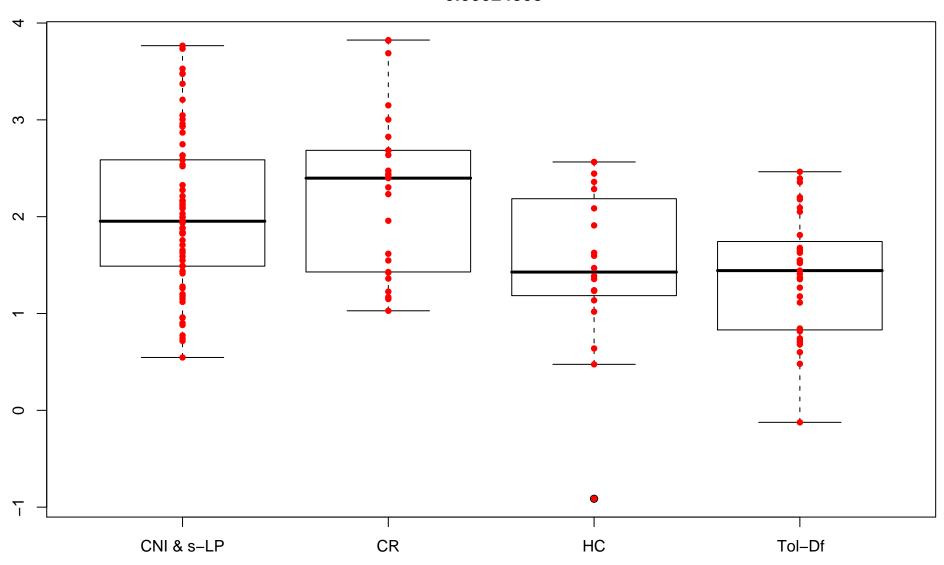
Rank 504 : SLC25A37 0.00024549



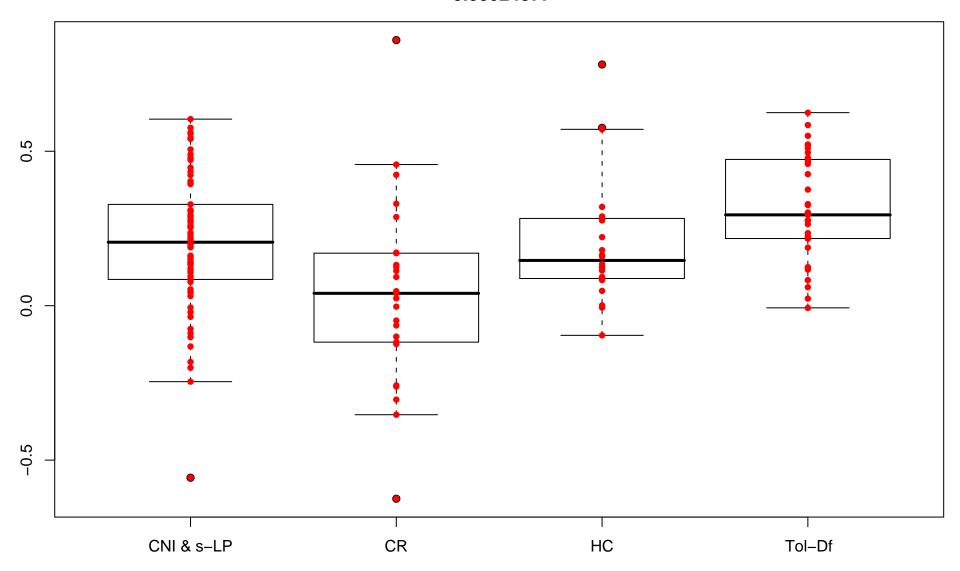
Rank 505 : PSMC6 0.00024675



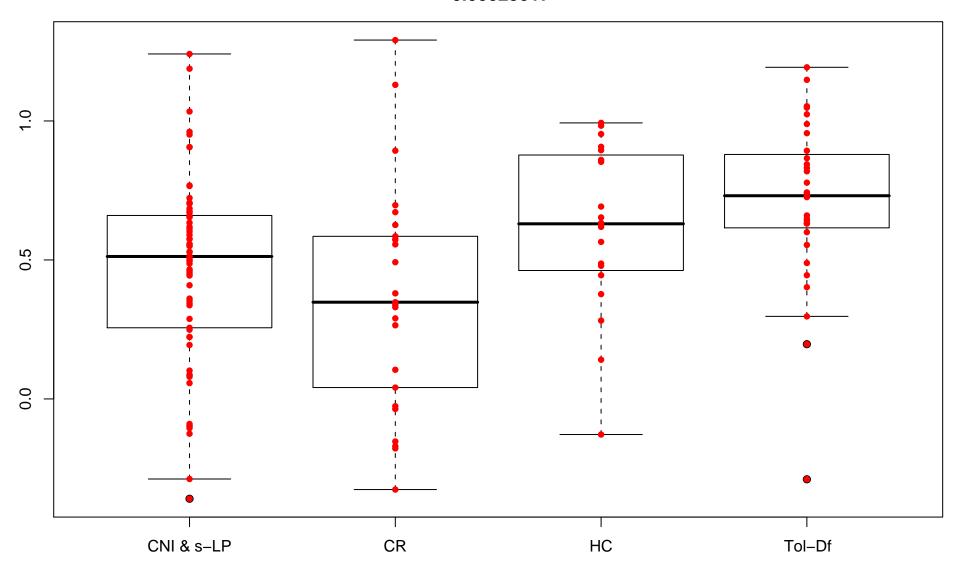
Rank 506 : NFIA 0.00024803



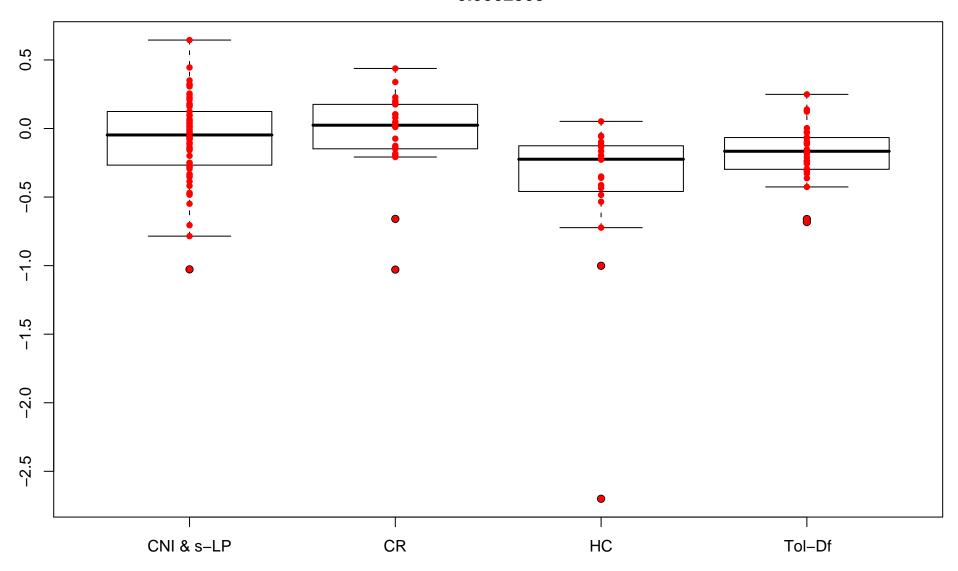
Rank 507 : TM2D1 0.00024877



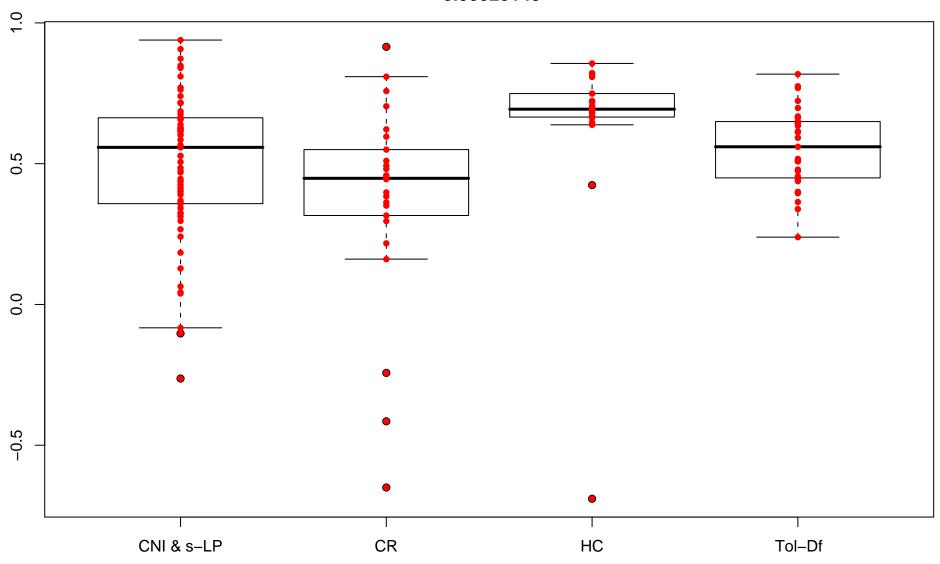
Rank 508 : ATR 0.00025017



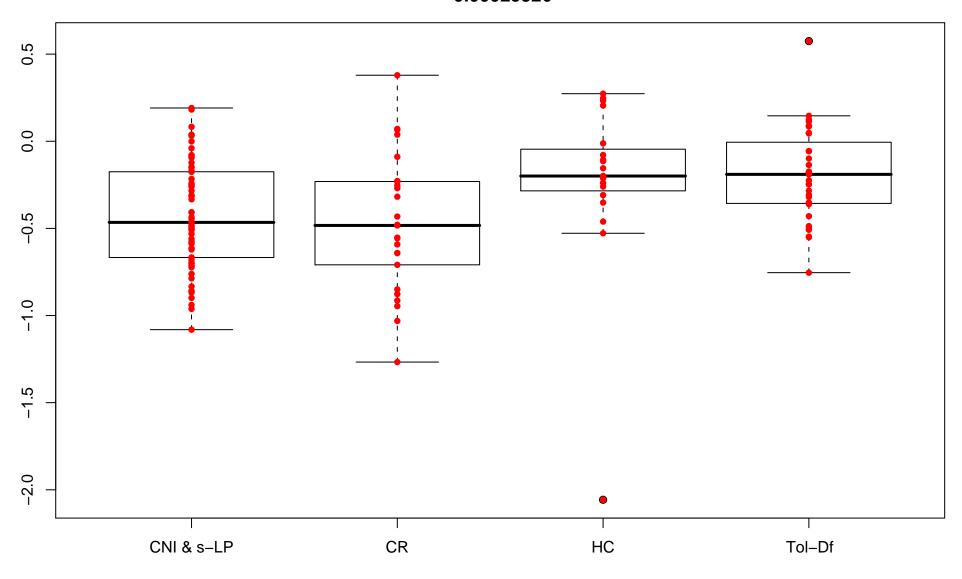
Rank 509 : VCPIP1 0.0002505



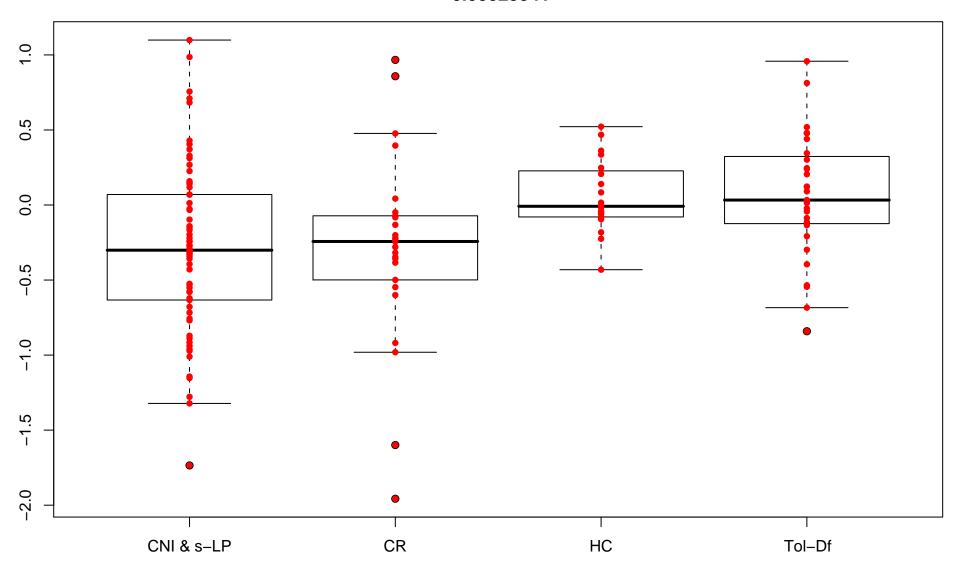
Rank 510 : WDR45L 0.00025145



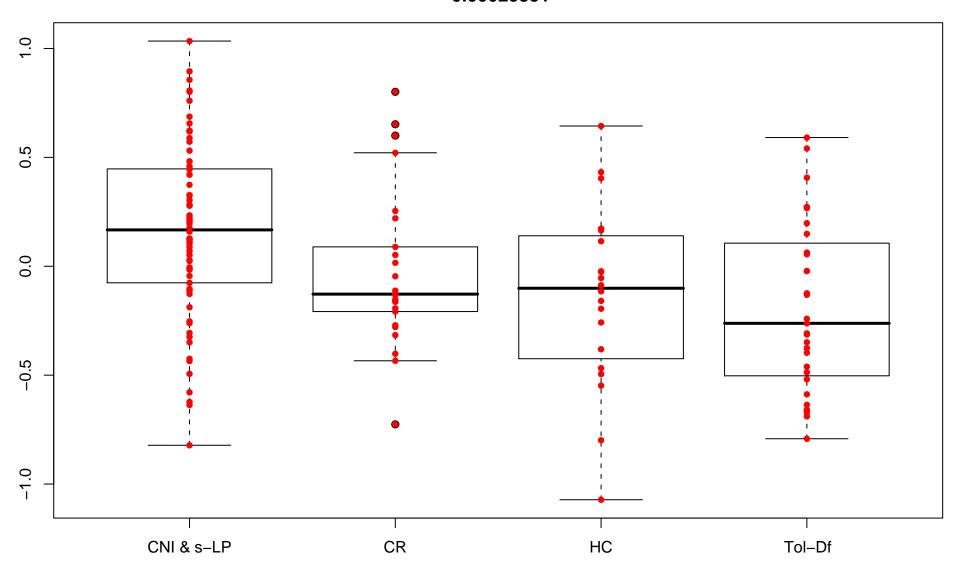
Rank 511 : ATG5 0.00025326



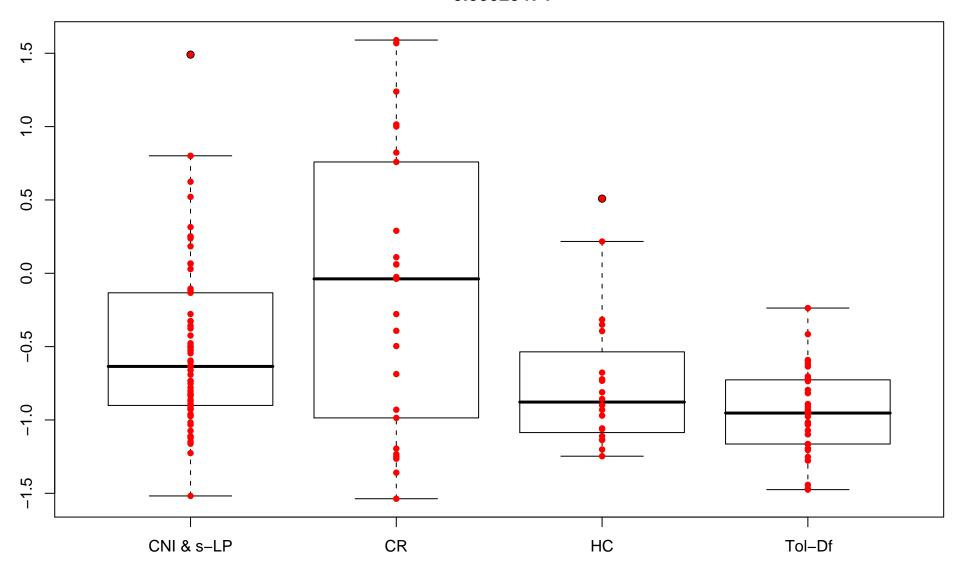
Rank 512 : NUCKS1 0.00025341



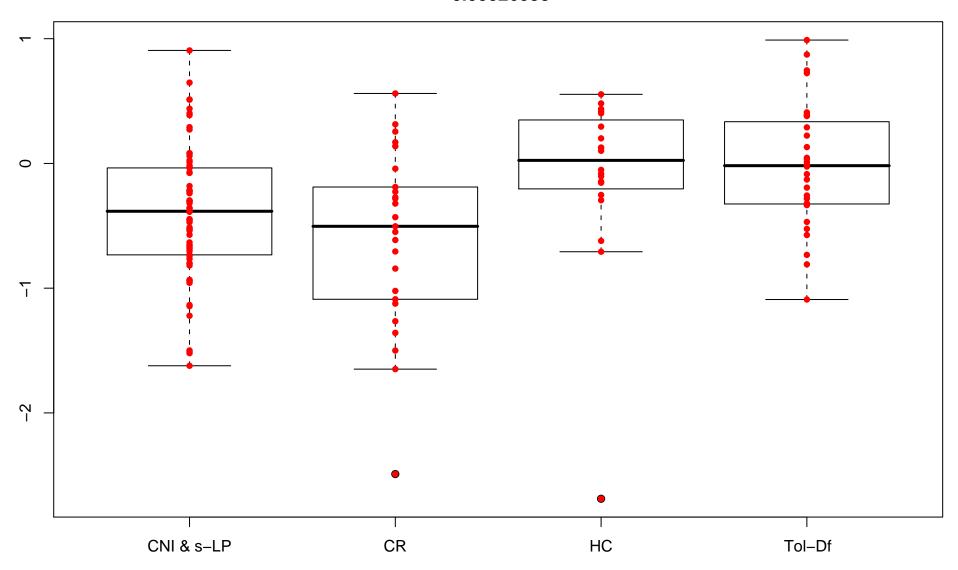
Rank 513 : LTB4R 0.00025351



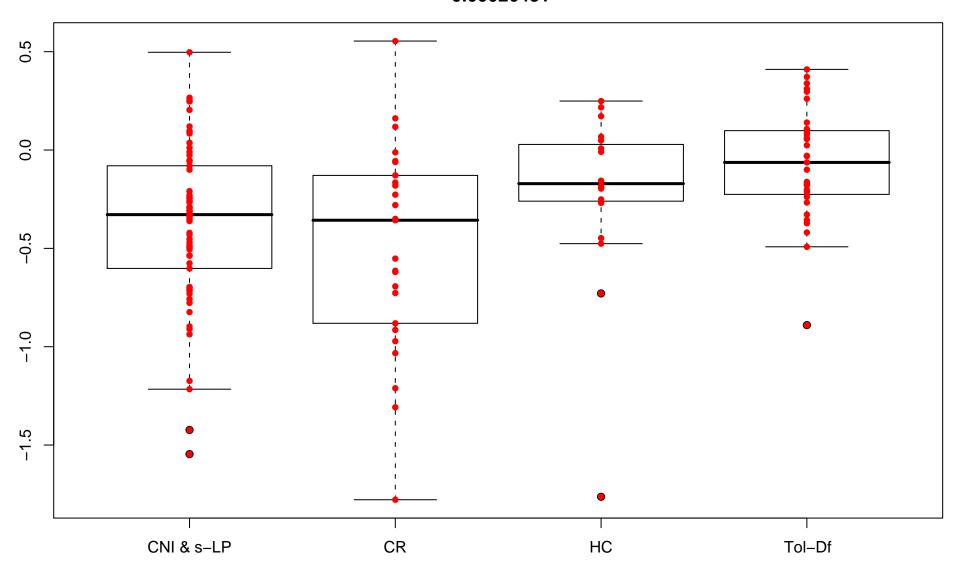
Rank 514 : POLR1D 0.00025474



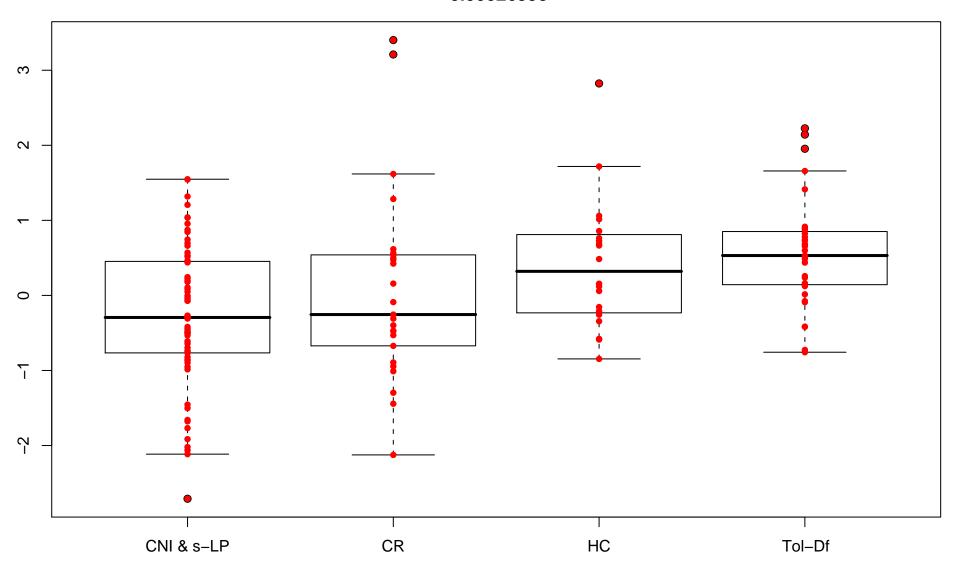
Rank 515 : PIGK 0.00026058



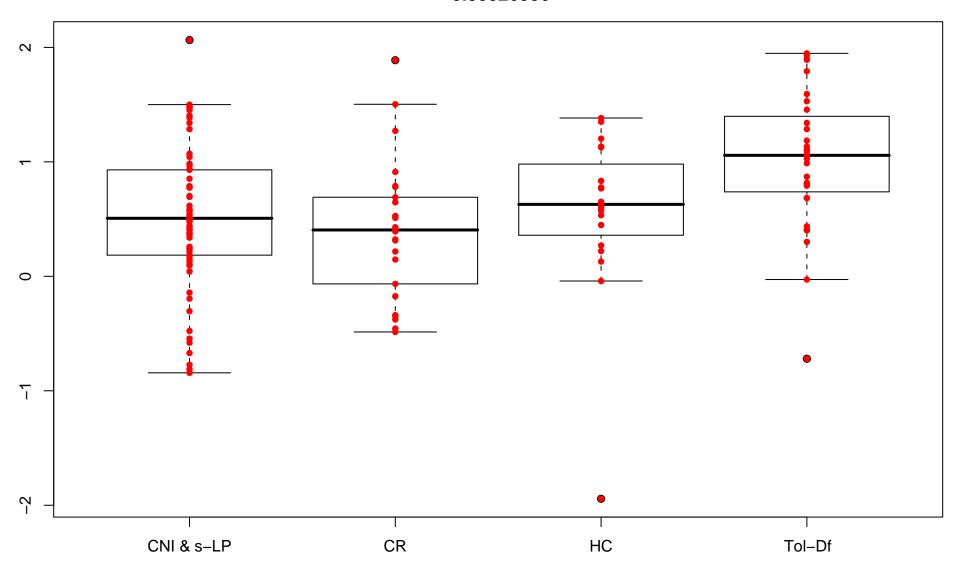
Rank 516 : SIP1 0.00026431



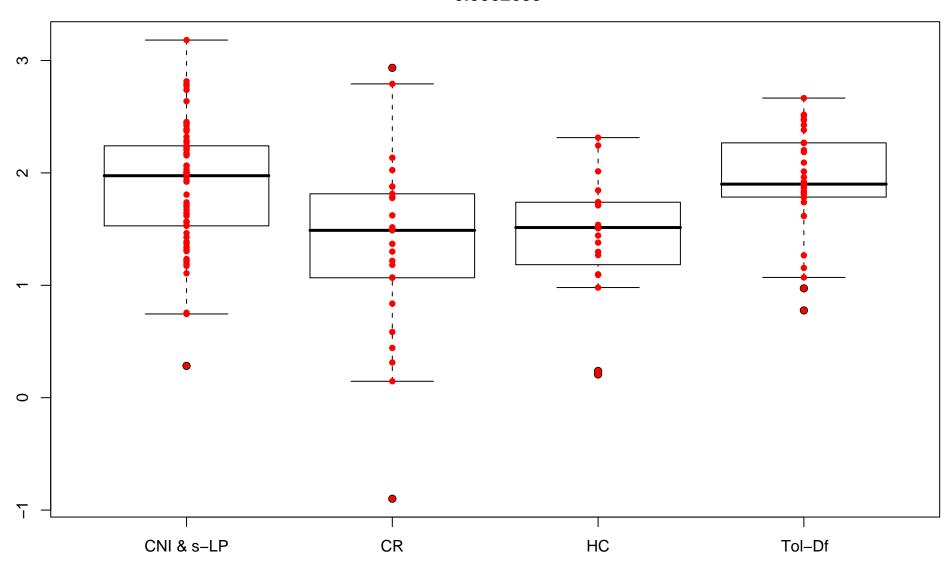
Rank 517 : PRICKLE1 0.00026598



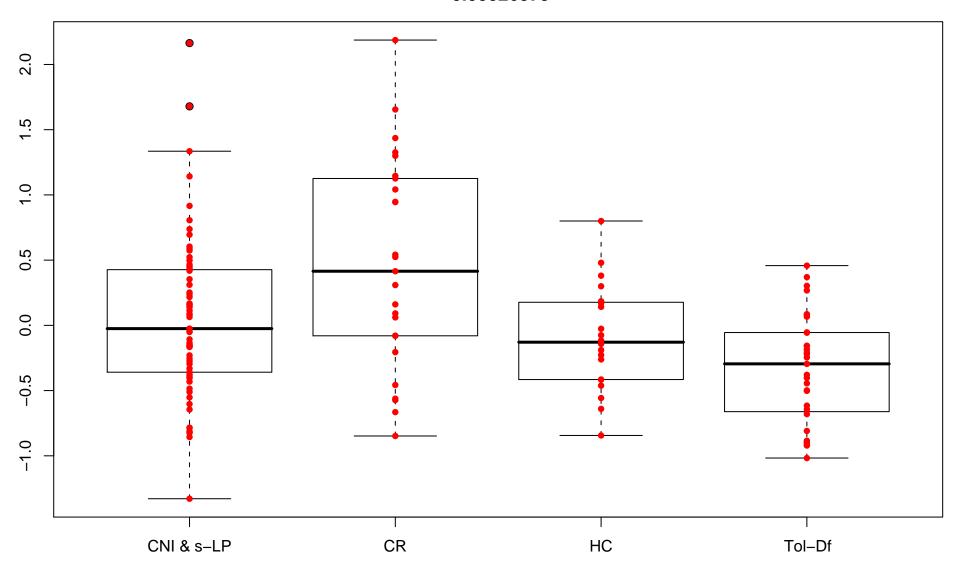
Rank 518 : ARHGEF9 0.00026806



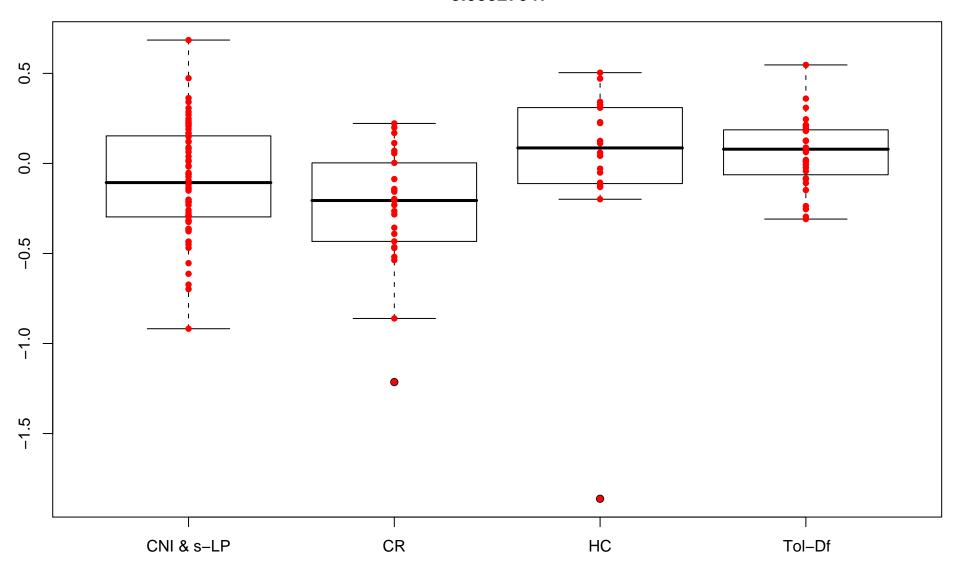
Rank 519 : MGC29891 0.0002685



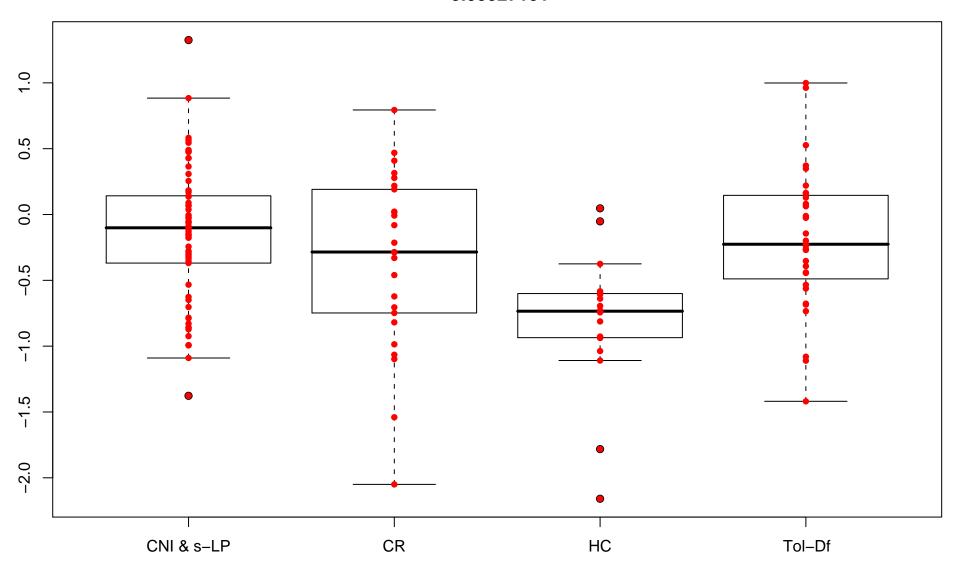
Rank 520 : AQP1 0.00026879



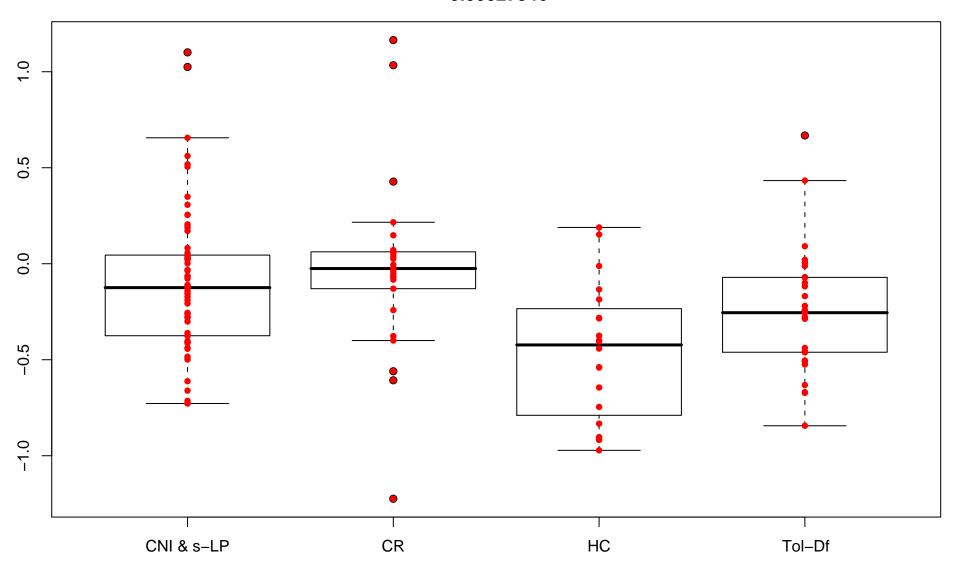
Rank 521 : CCDC90B 0.00027047



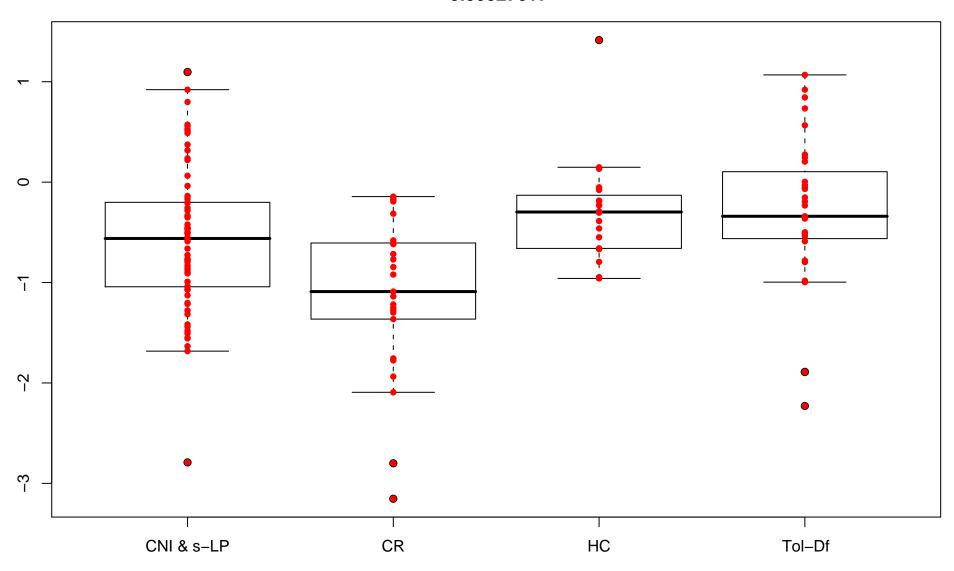
Rank 522 : SYT11 0.00027101



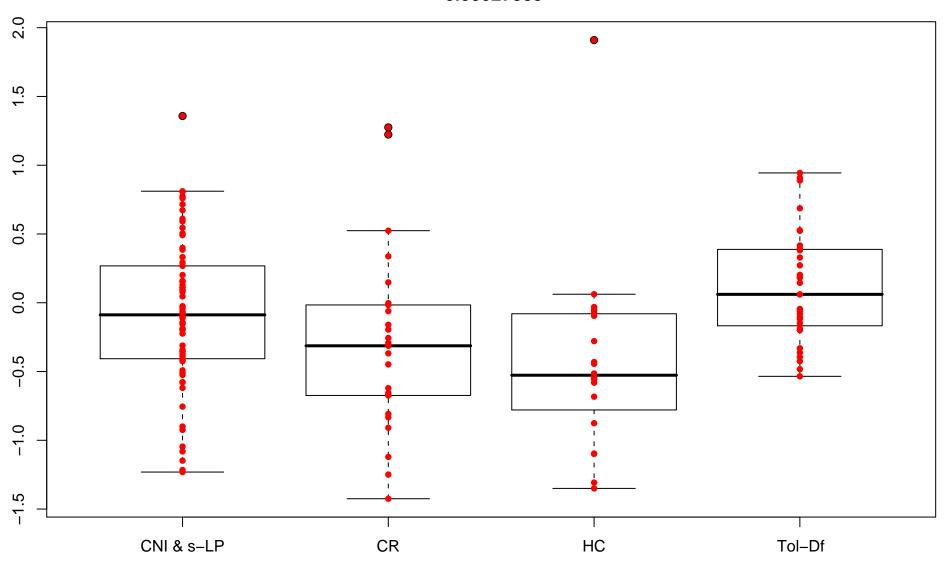
Rank 523 : LOC440354 0.00027346



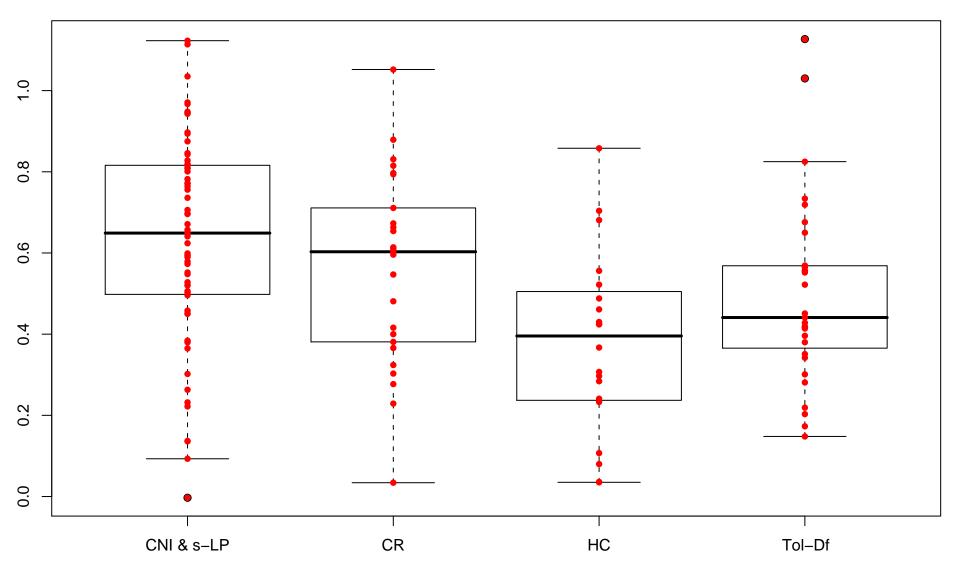
Rank 524 : TRD@ 0.00027617



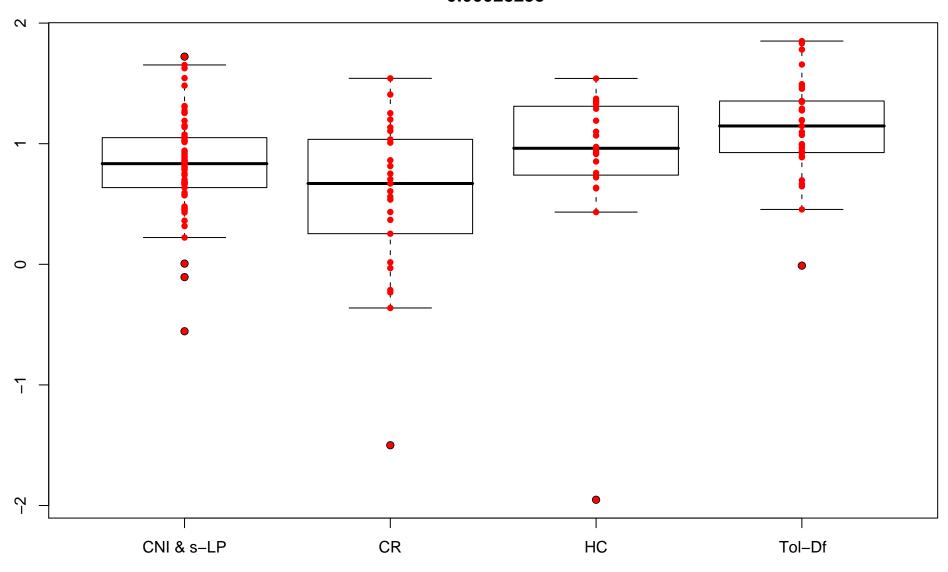
Rank 525 : KIF21A 0.00027885



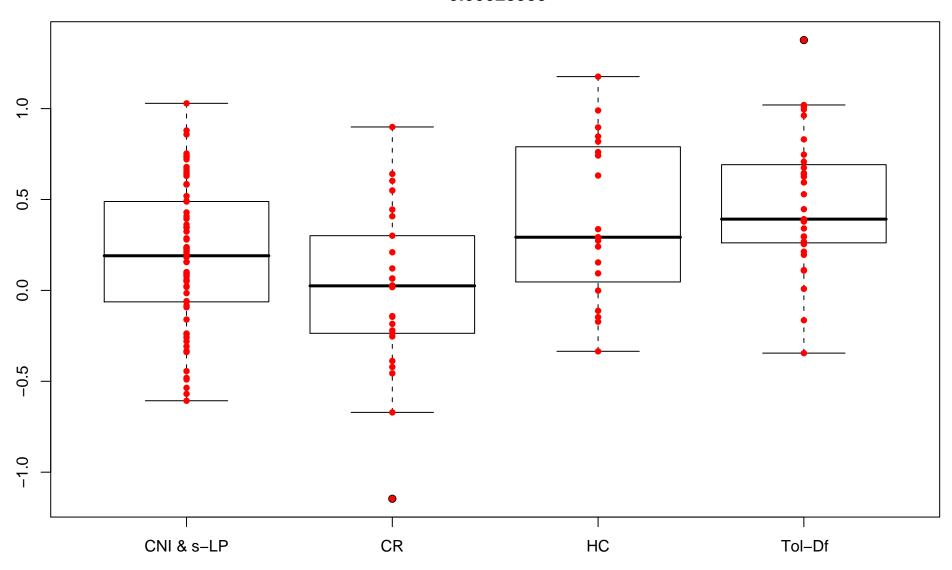
Rank 526 : MOBKL2A 0.00028042



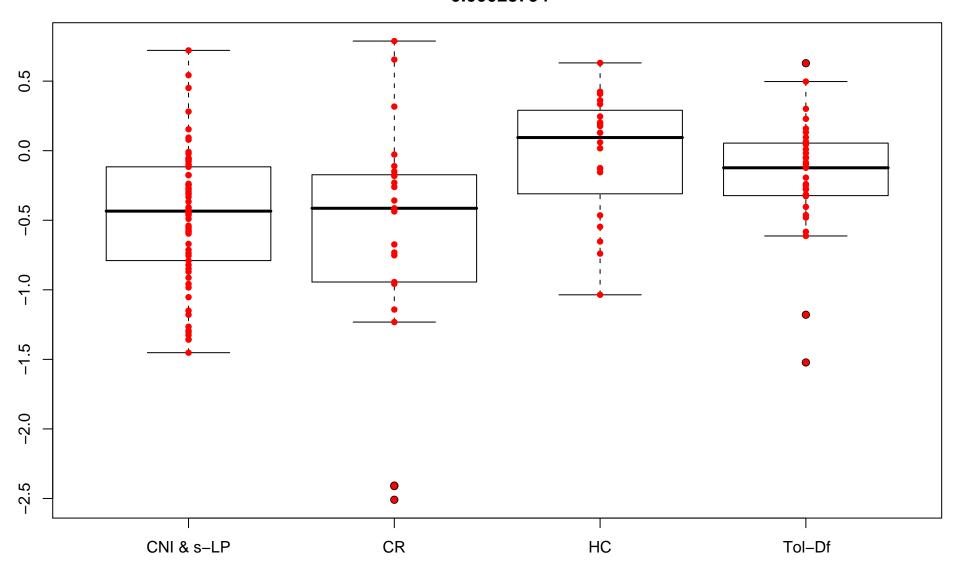
Rank 527 : LRBA 0.00028255



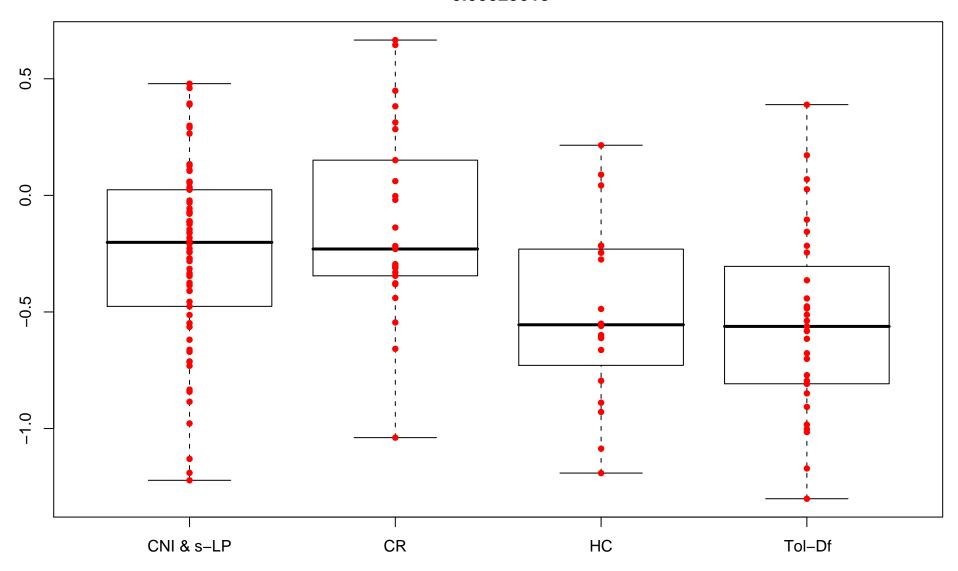
Rank 528 : AK095738 0.00028555



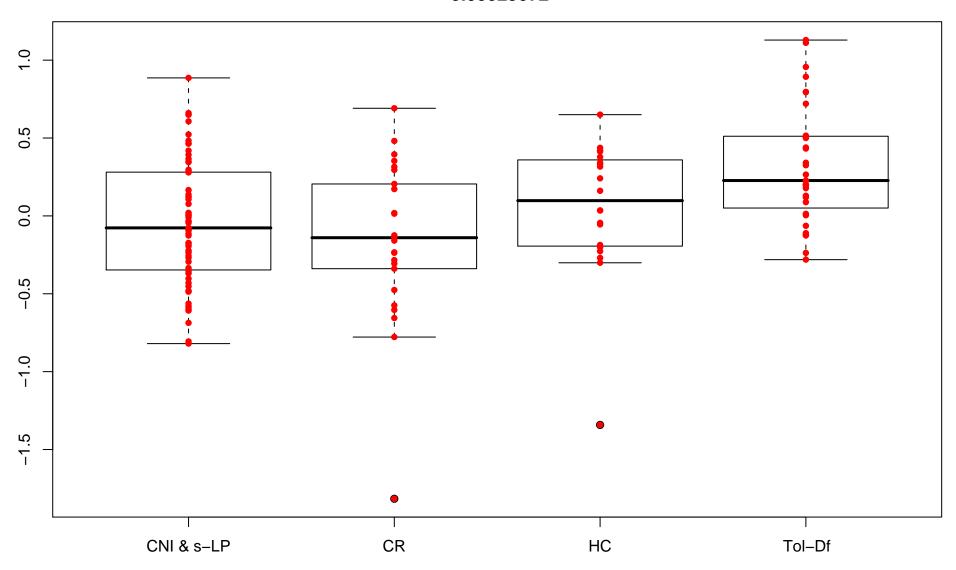
Rank 529 : CENPQ 0.00028794



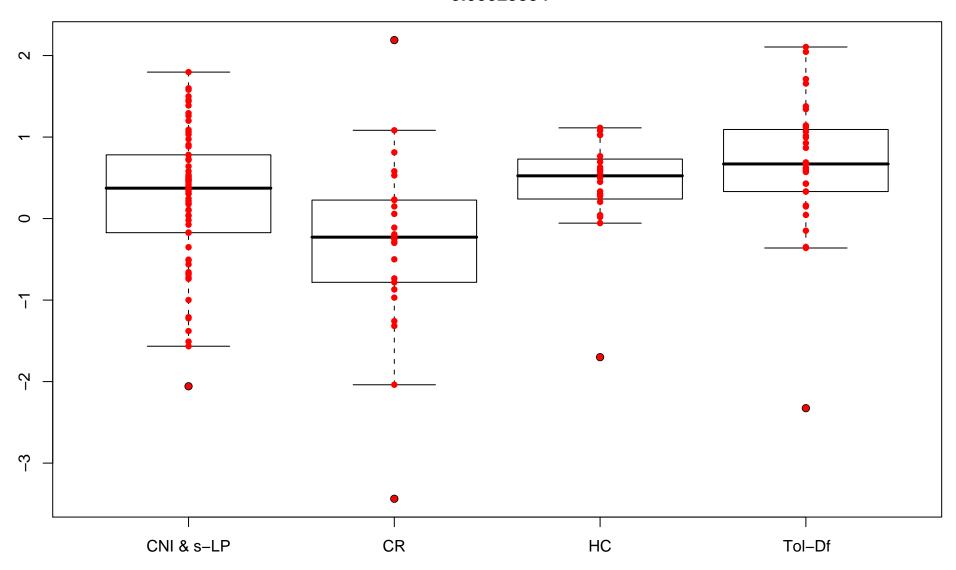
Rank 530 : CXCL16 0.00029013



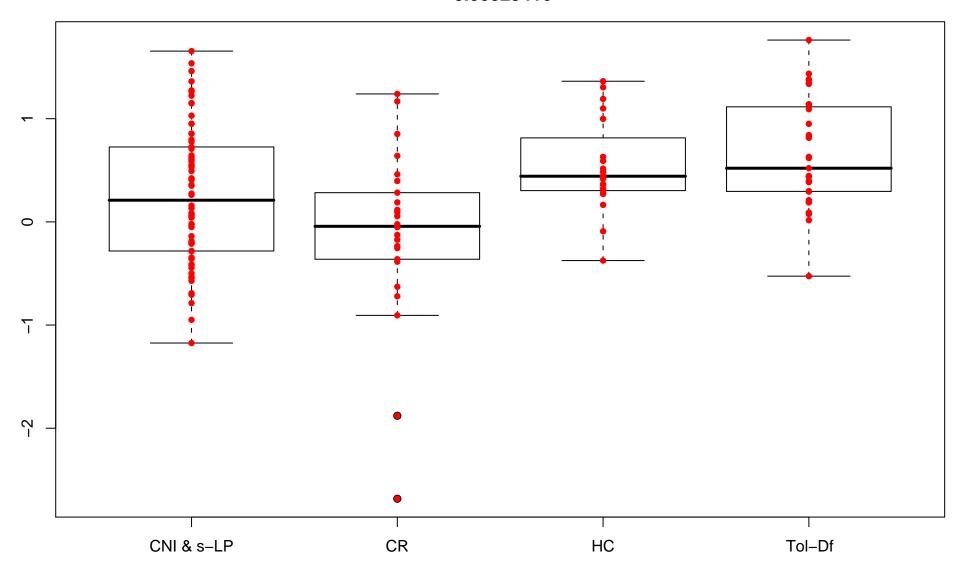
Rank 531 : USP47 0.00029072



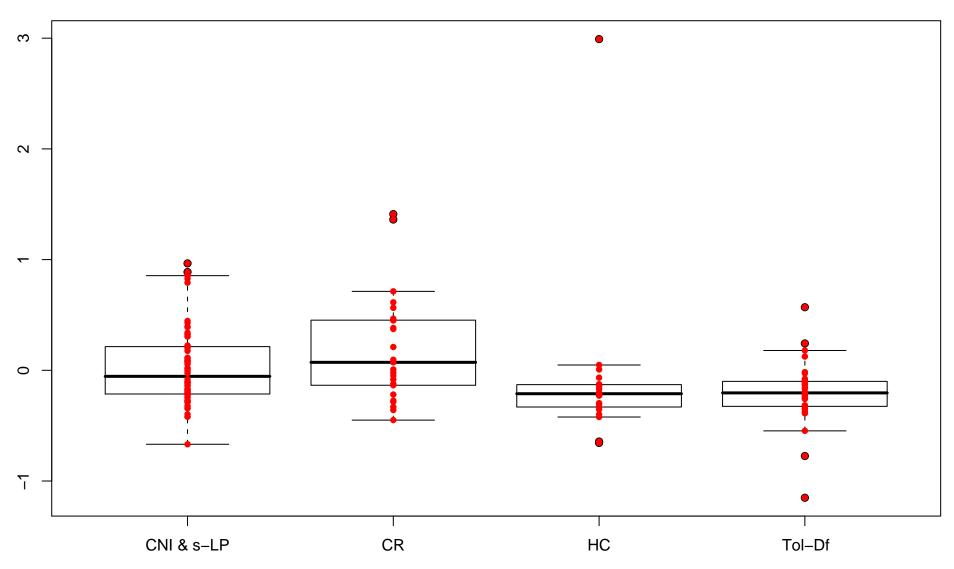
Rank 532 : TGFBR3 0.00029394



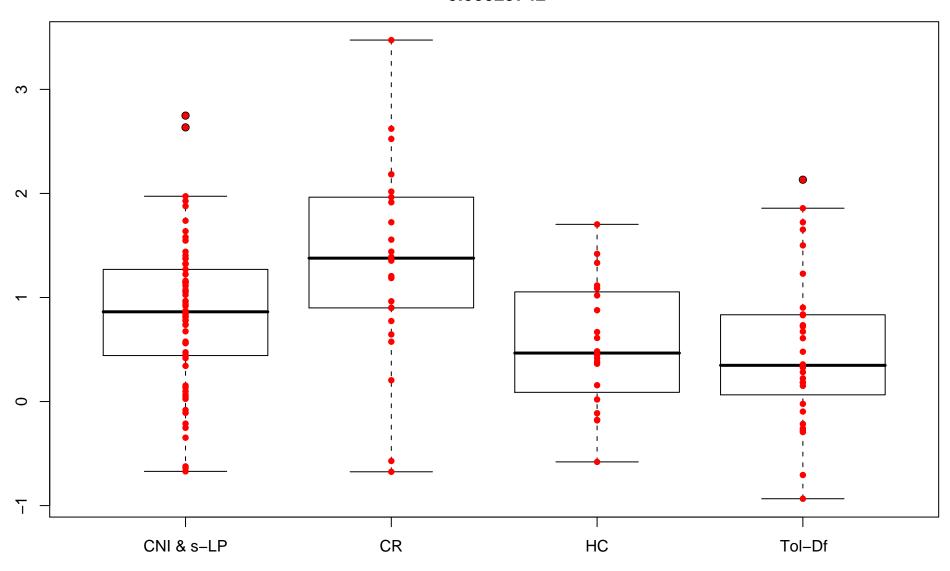
Rank 533 : CD96 0.00029416



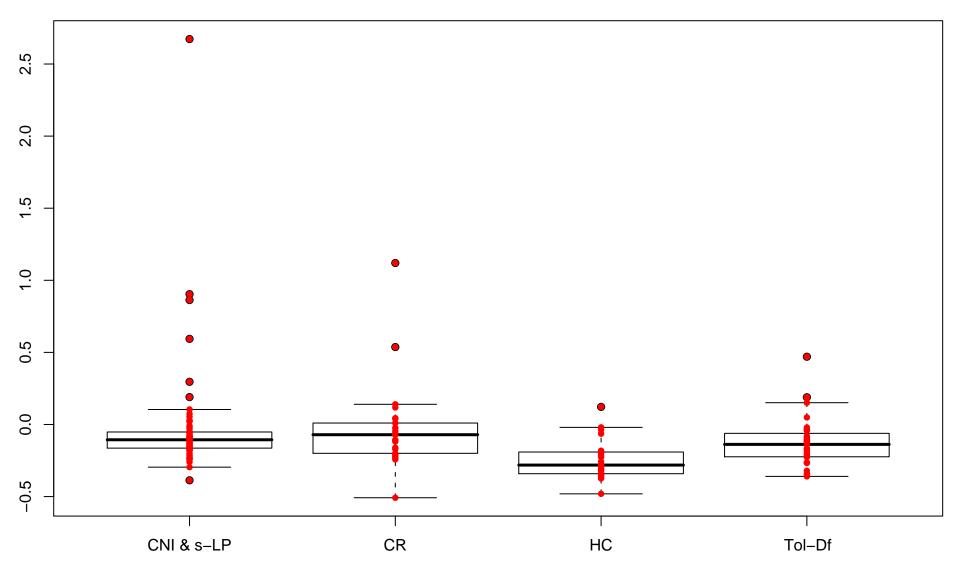
Rank 534 : PTK2B 0.00029592



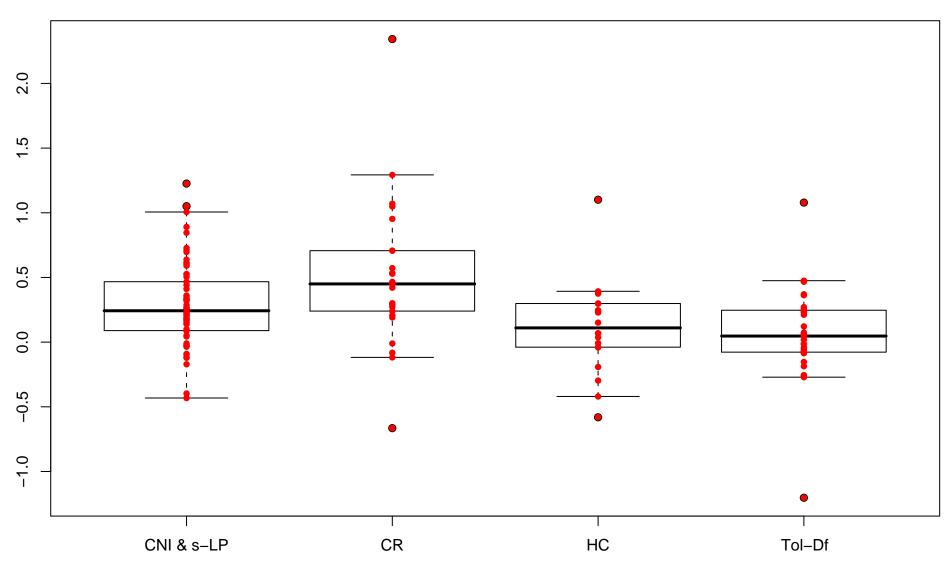
Rank 535 : CDC42BPA 0.00029742



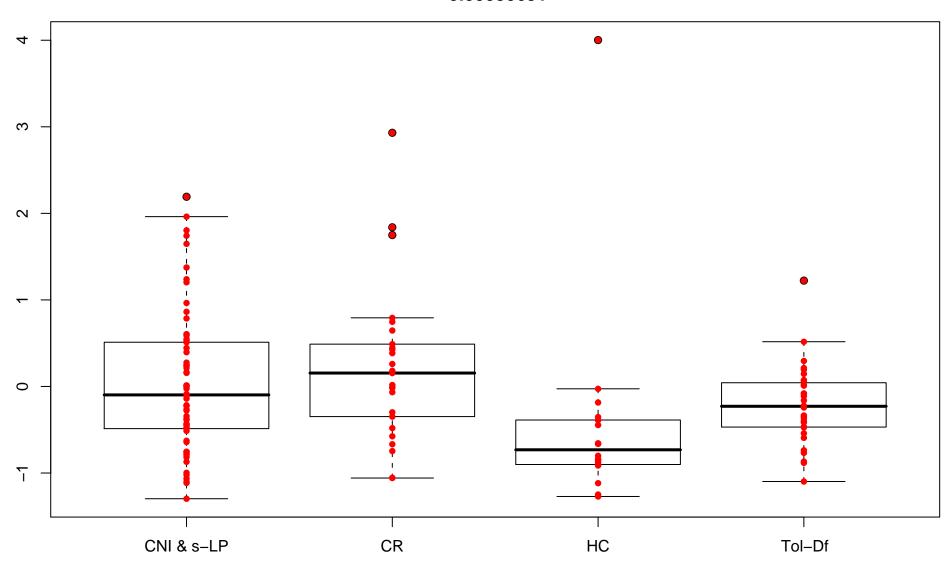
Rank 536 : C21ORF34 0.00029813



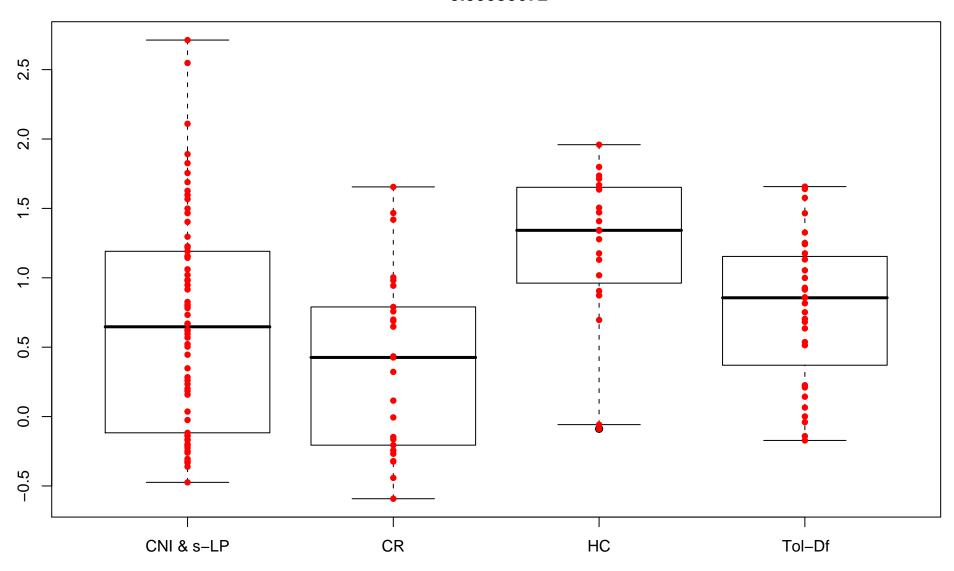
Rank 537 : N-PAC 0.00030107



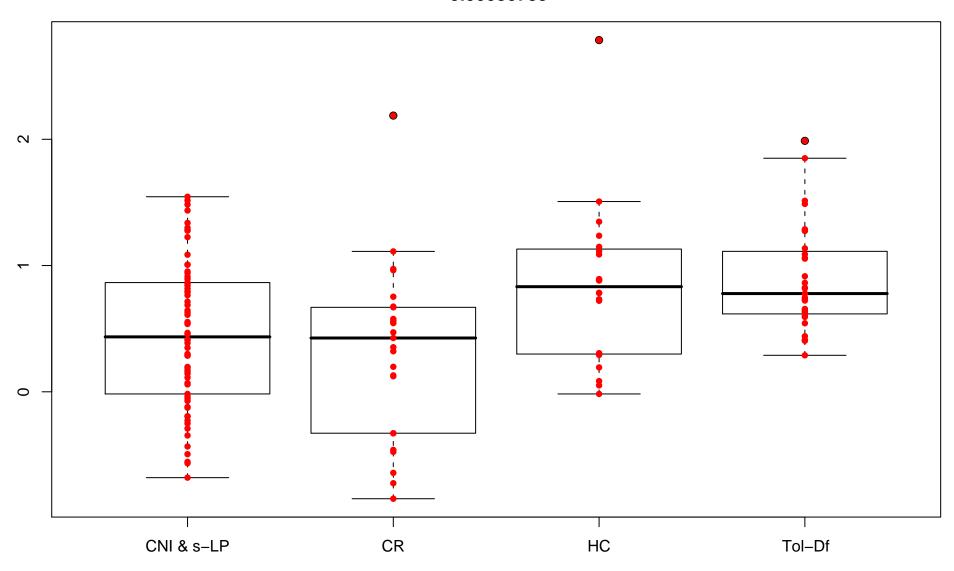
Rank 538: TMSB4X;TMSL3 0.00030651



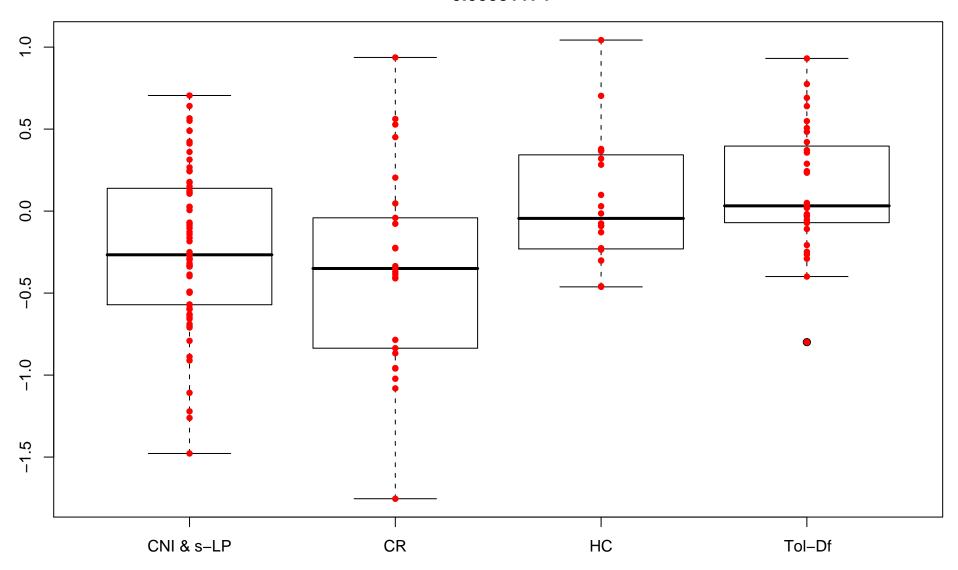
Rank 539 : A\_24\_P297302 0.00030672



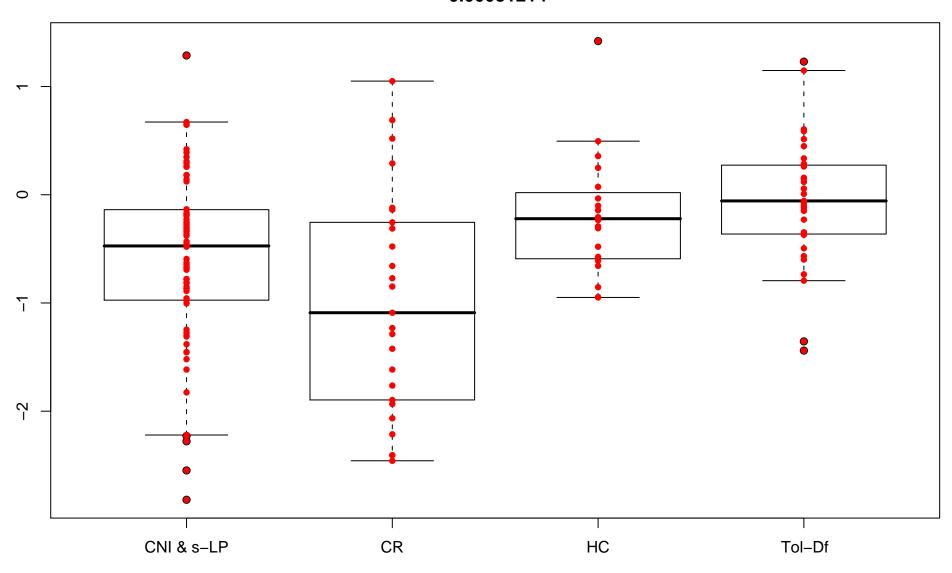
Rank 540 : LTBP3 0.00030789



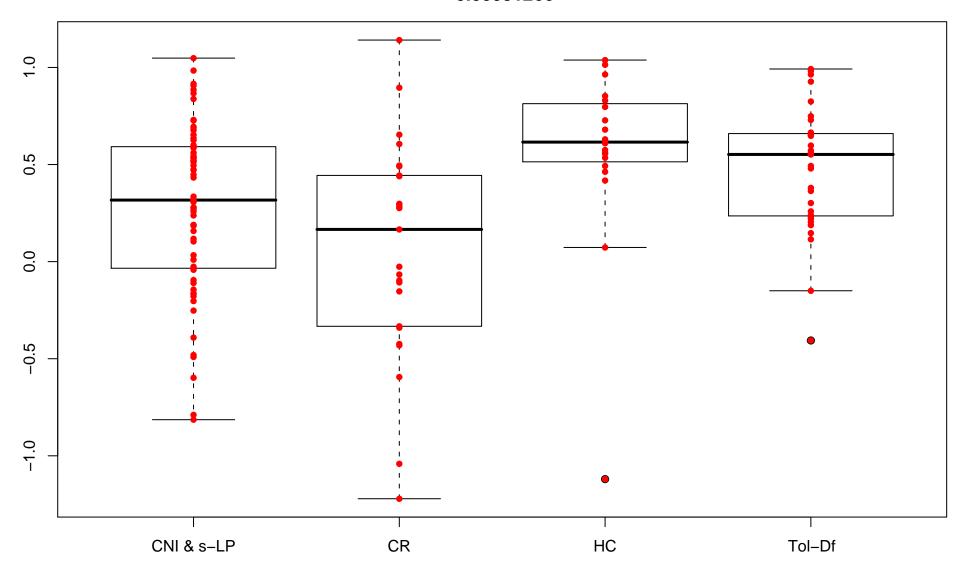
Rank 541 : MNAT1 0.00031174



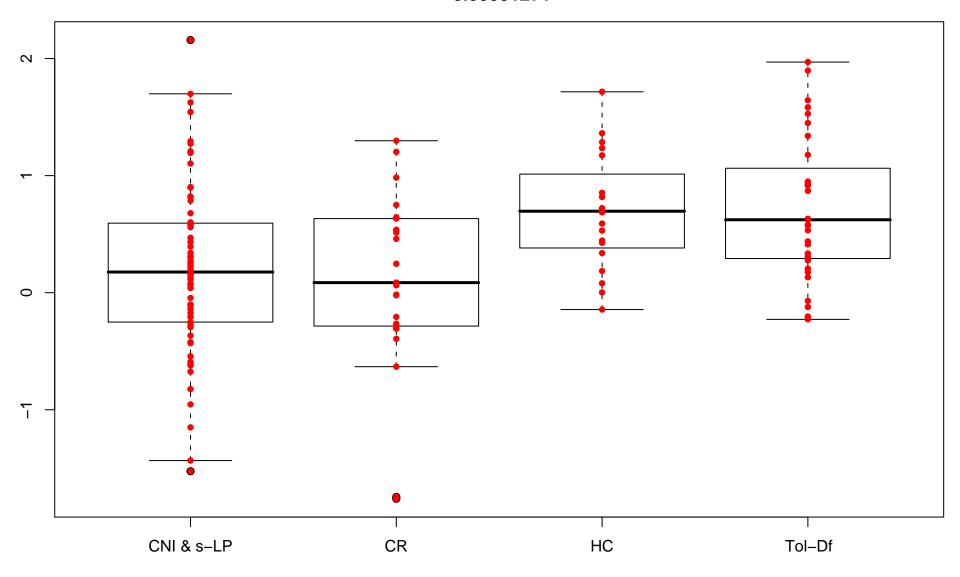
Rank 542 : DNAJC18 0.00031214



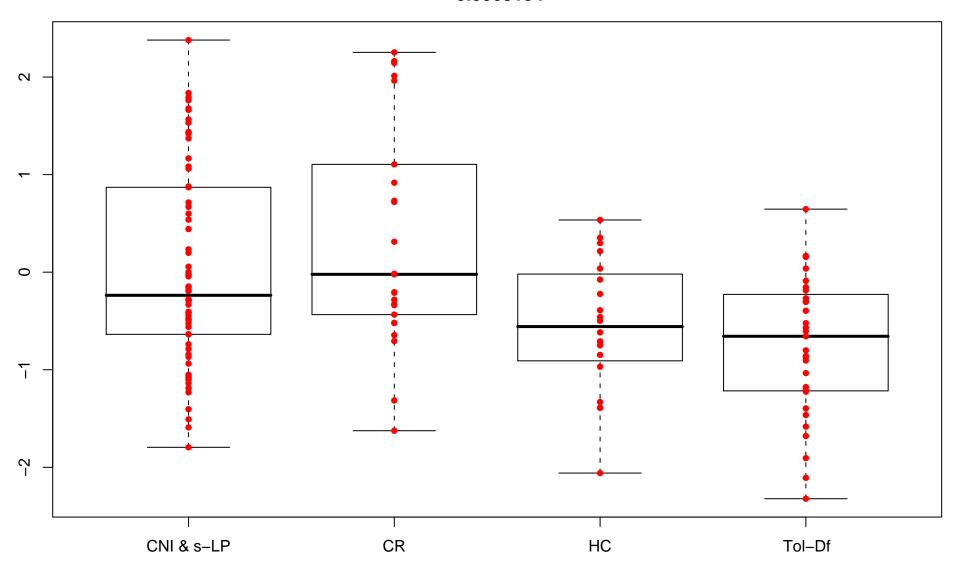
Rank 543 : PRNP 0.00031266



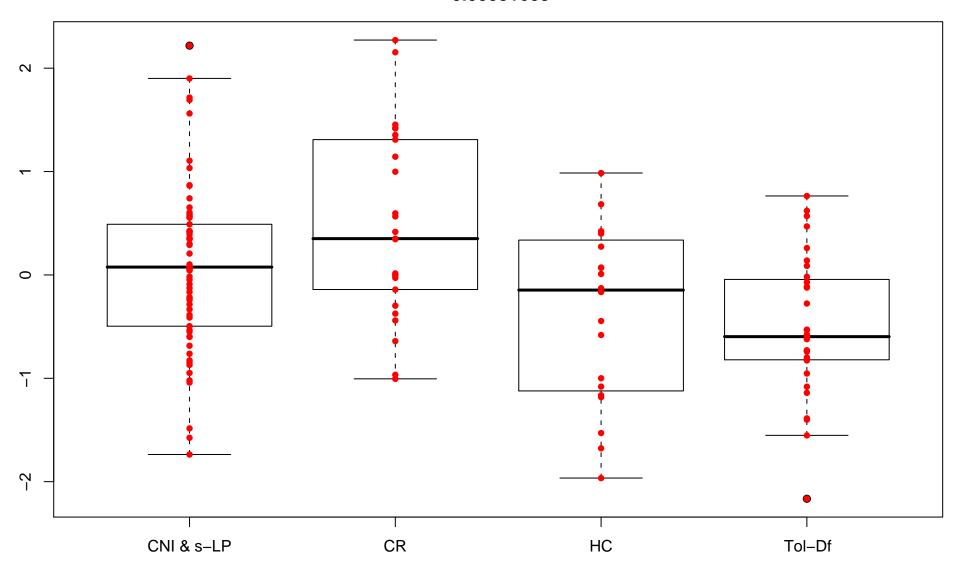
Rank 544 : BCL2 0.00031271



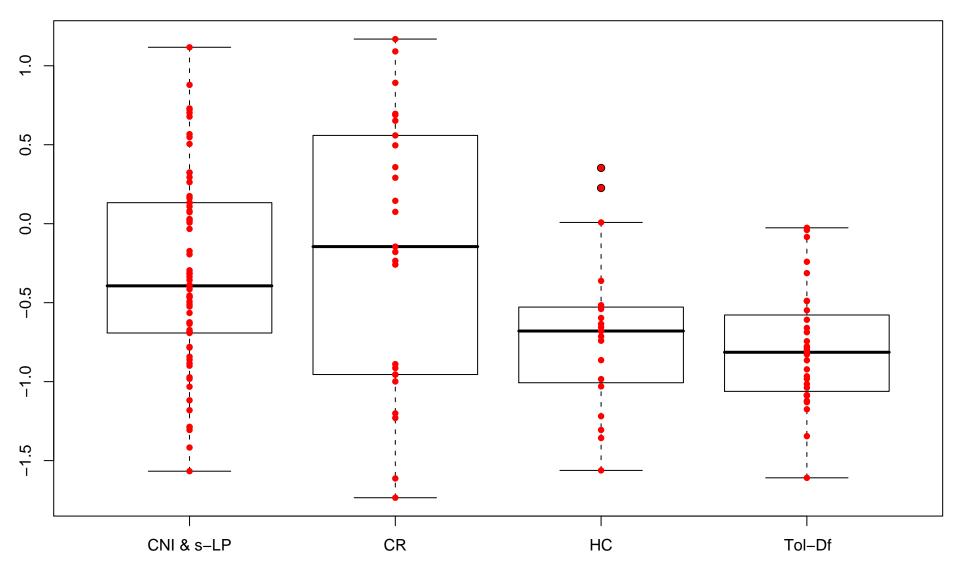
Rank 545 : IL1R2 0.0003134



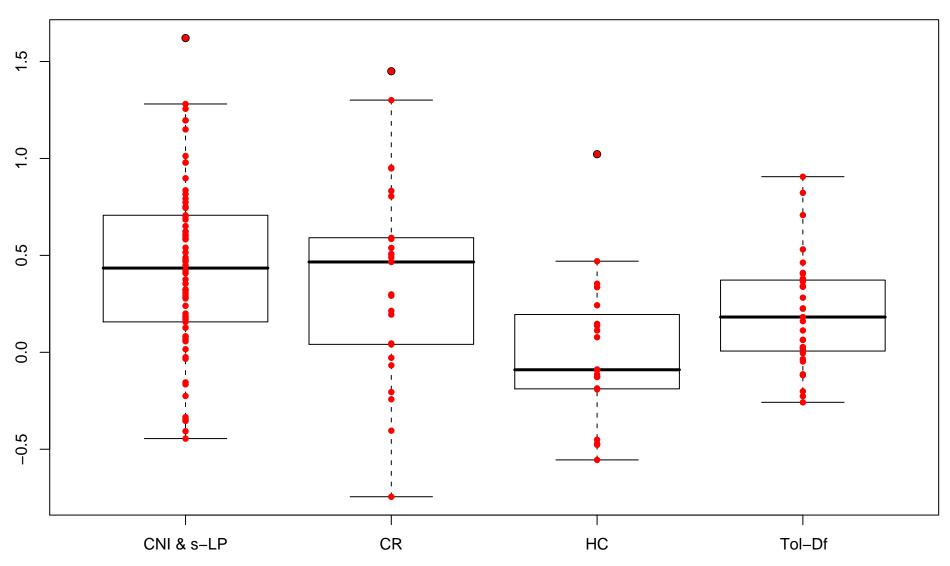
Rank 546 : ARHGEF12 0.00031605



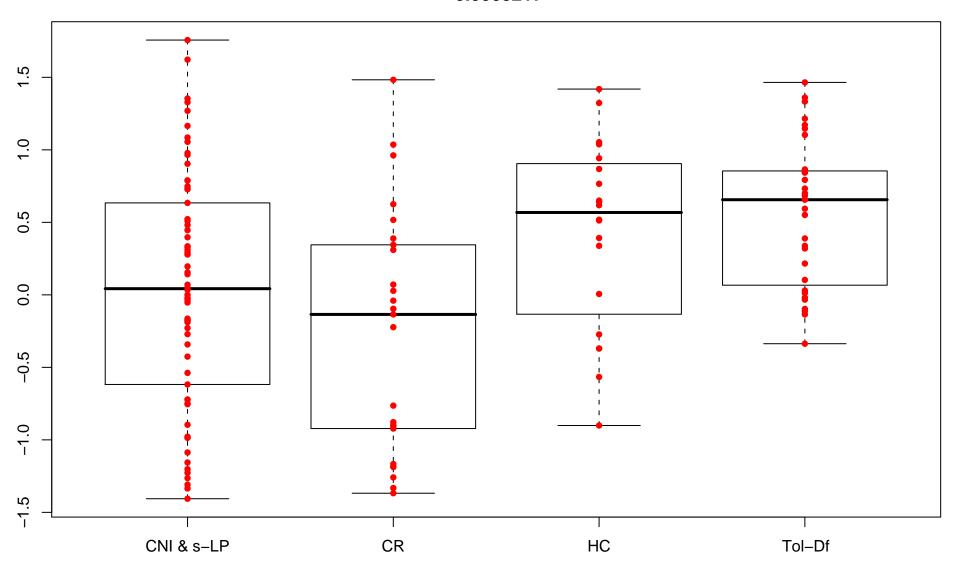
Rank 547 : SRRD;TFIP11 0.0003176



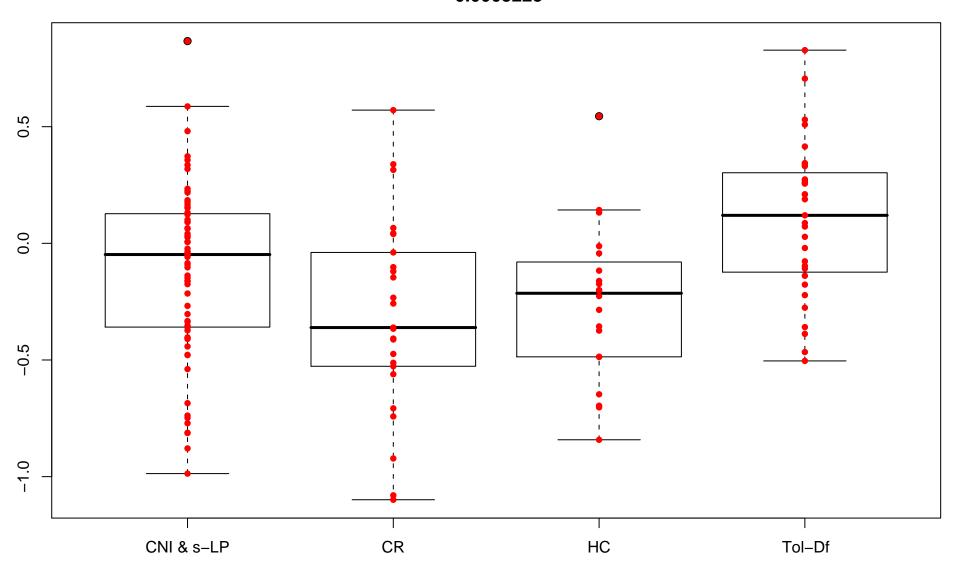
Rank 548: RASGEF1A 0.00032



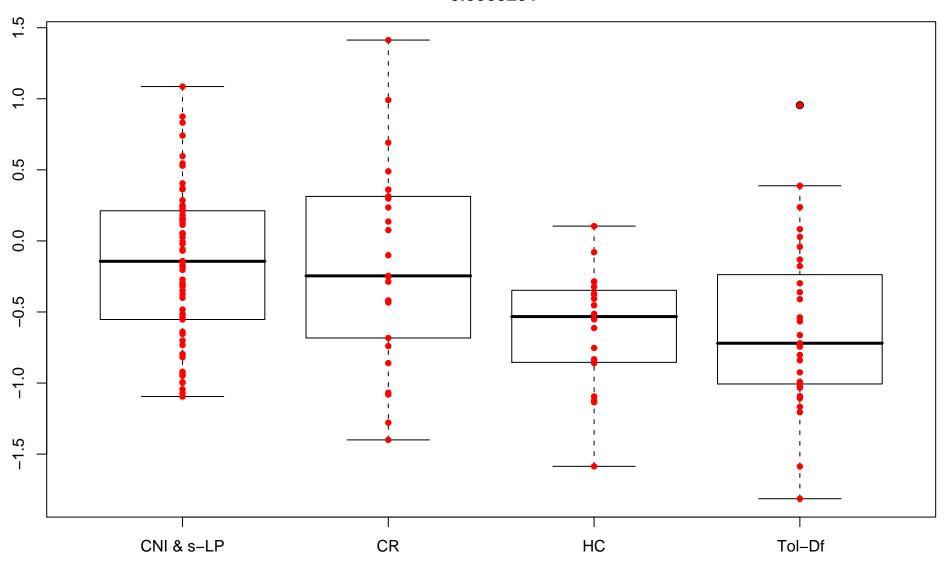
Rank 549 : GPRASP1 0.0003217



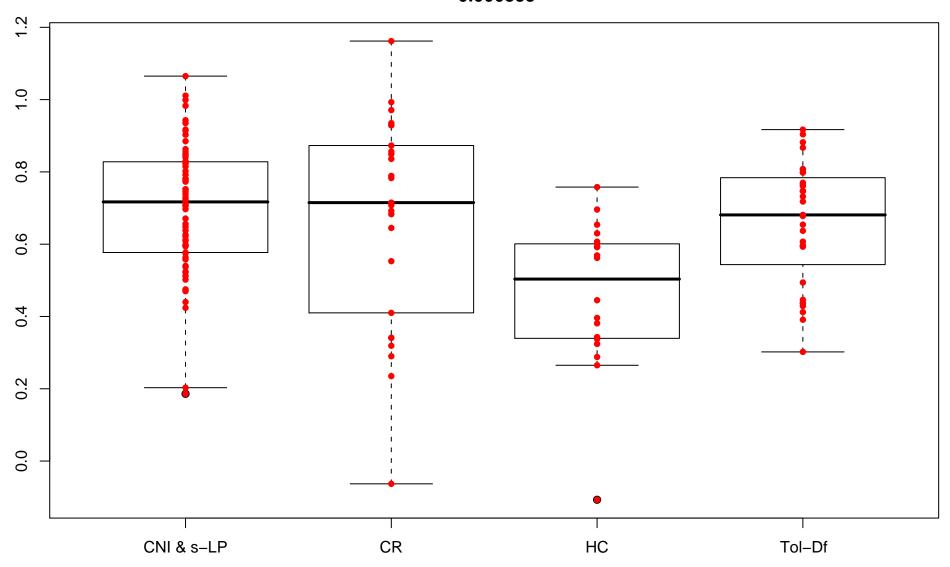
Rank 550 : UCP3 0.0003223



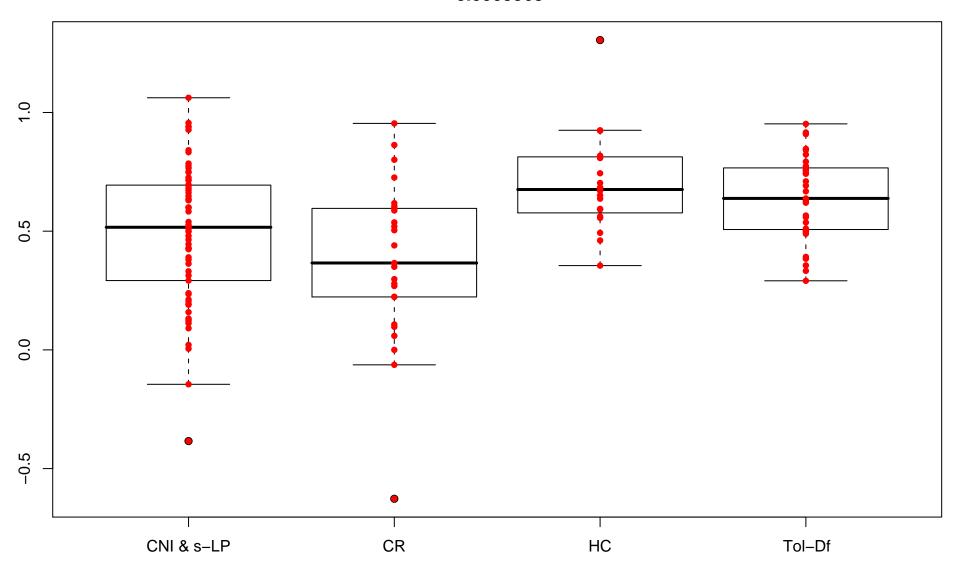
Rank 551 : GNAQ 0.0003251



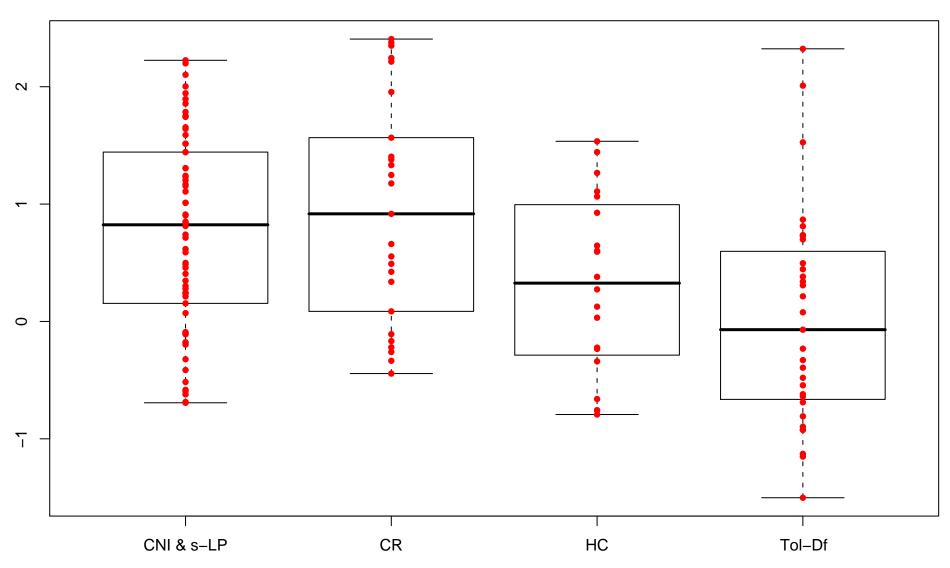
Rank 552 : DHX8 0.000335



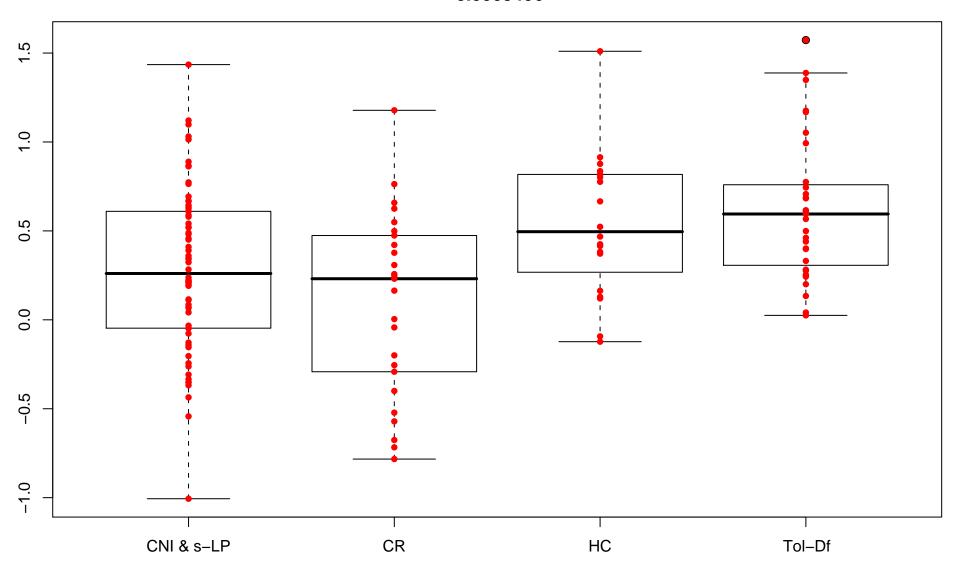
Rank 553 : FAM29A 0.0003363



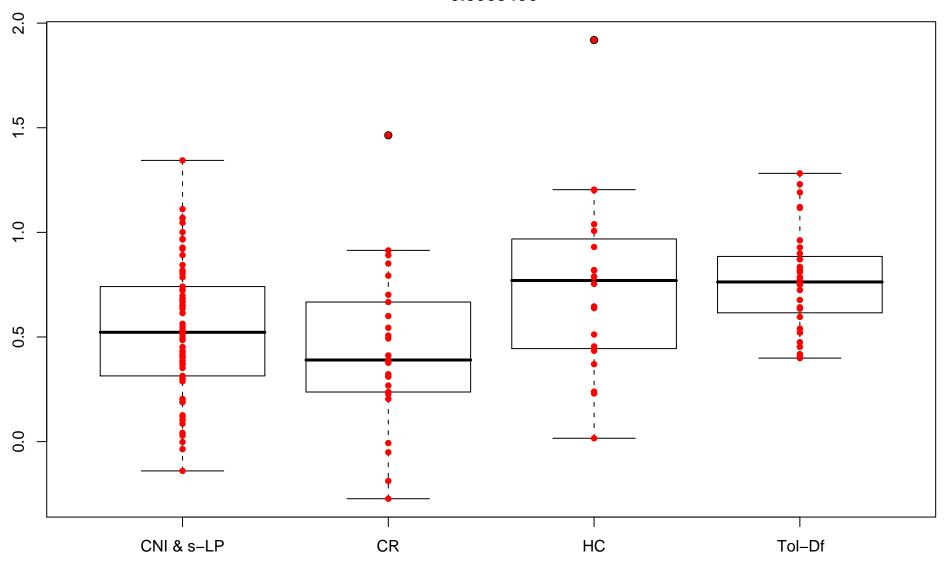
Rank 554 : ABCA1 0.0003364



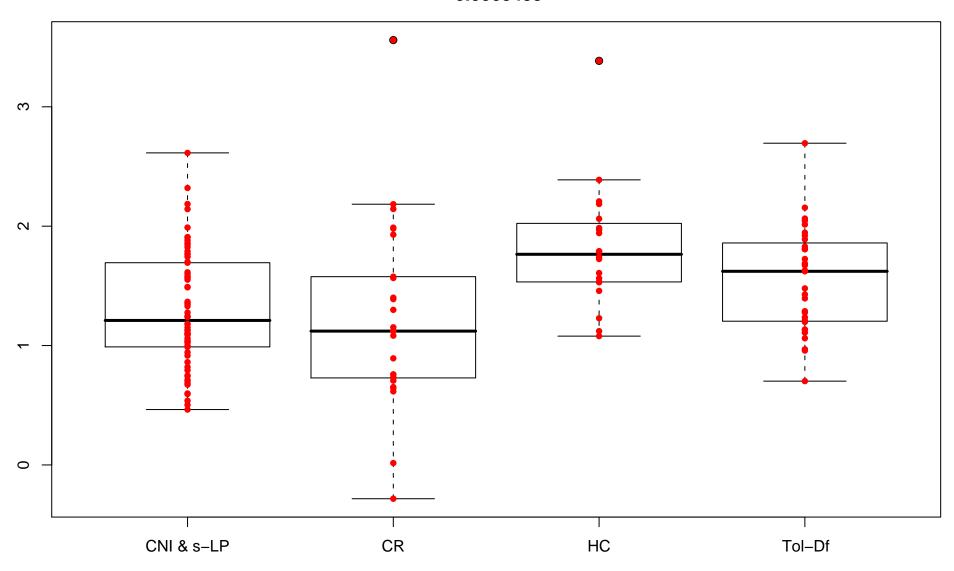
Rank 555 : PCM1 0.0003406



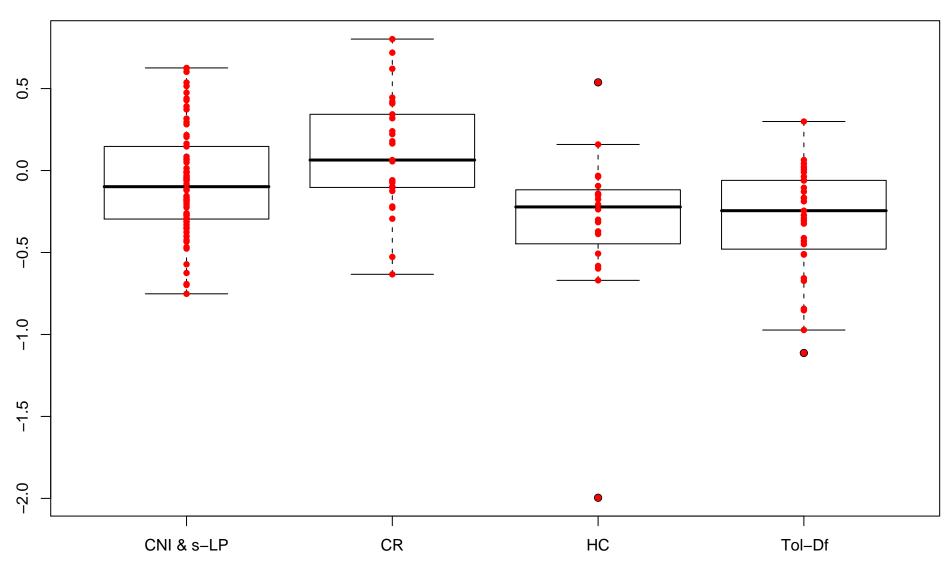
Rank 556 : TBCD 0.0003406



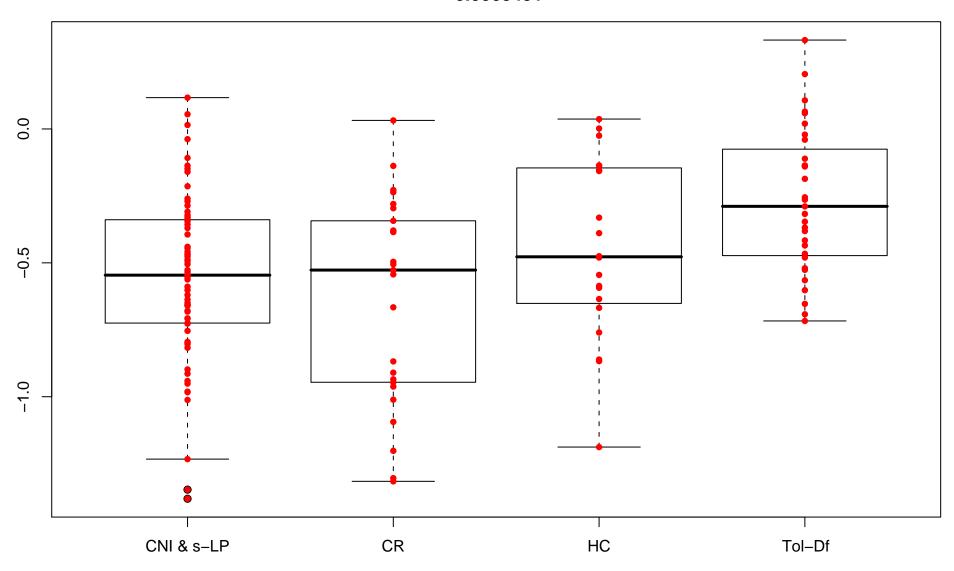
Rank 557 : AGMAT 0.0003439



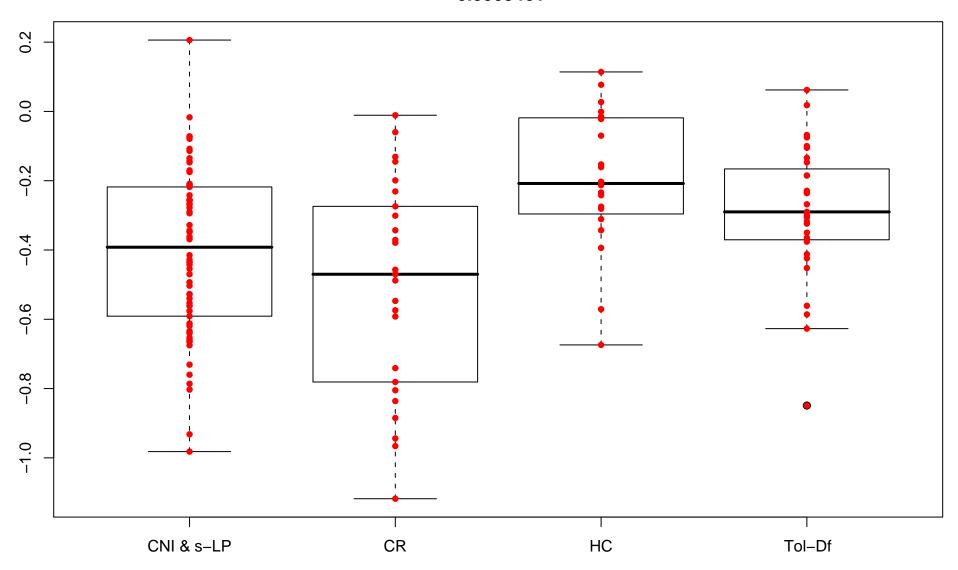
Rank 558 : IFITM2 0.0003444



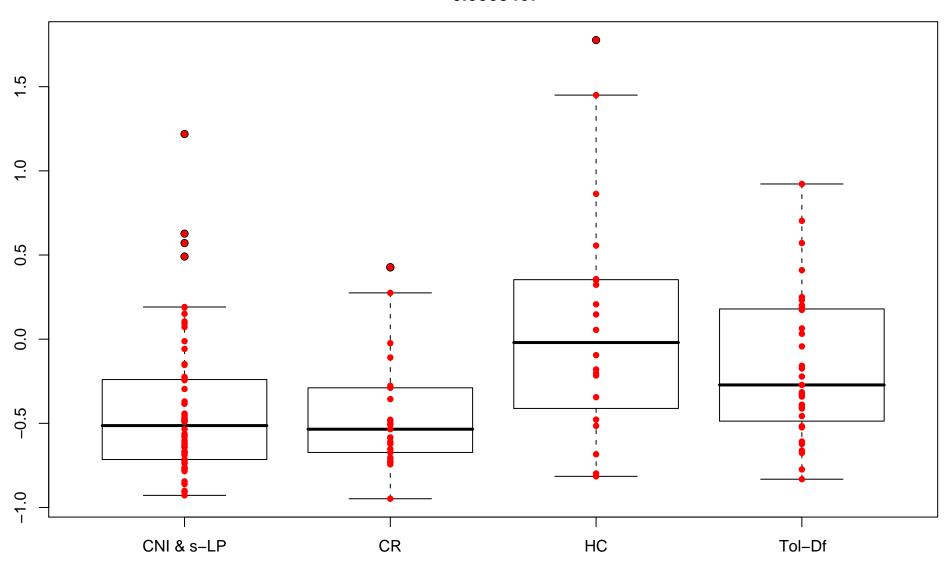
Rank 559 : PSMB4 0.0003451



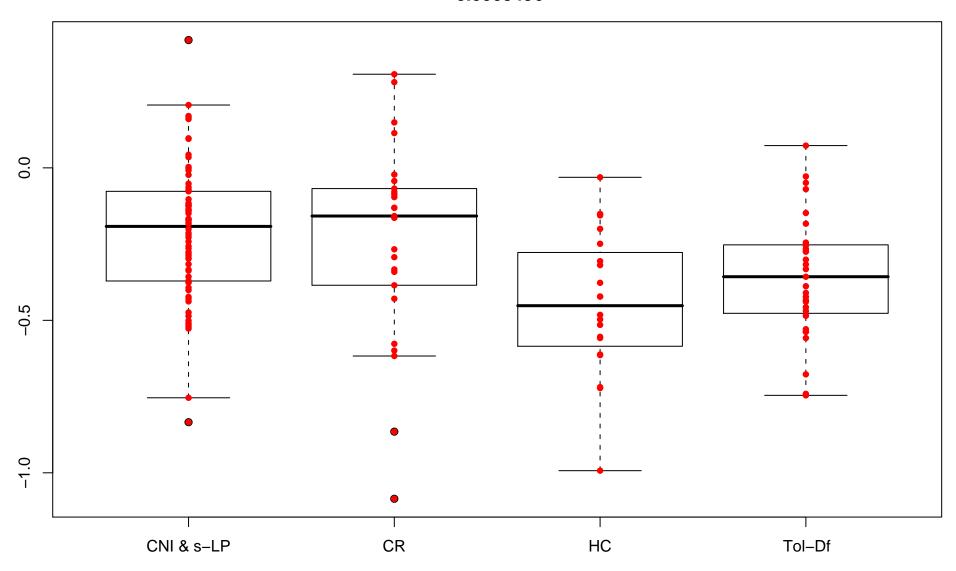
Rank 560 : ITGAE 0.0003461



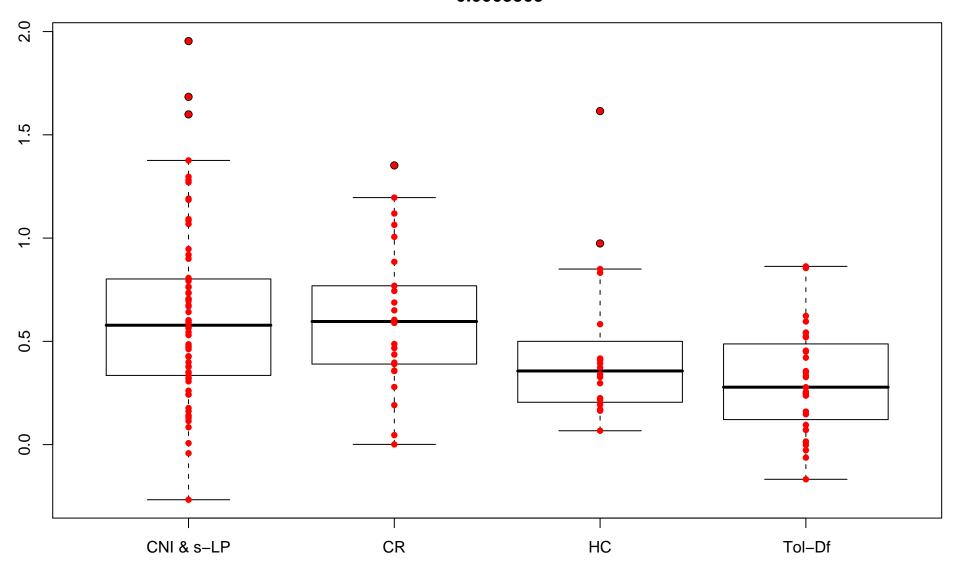
Rank 561 : A\_24\_P942312 0.0003467



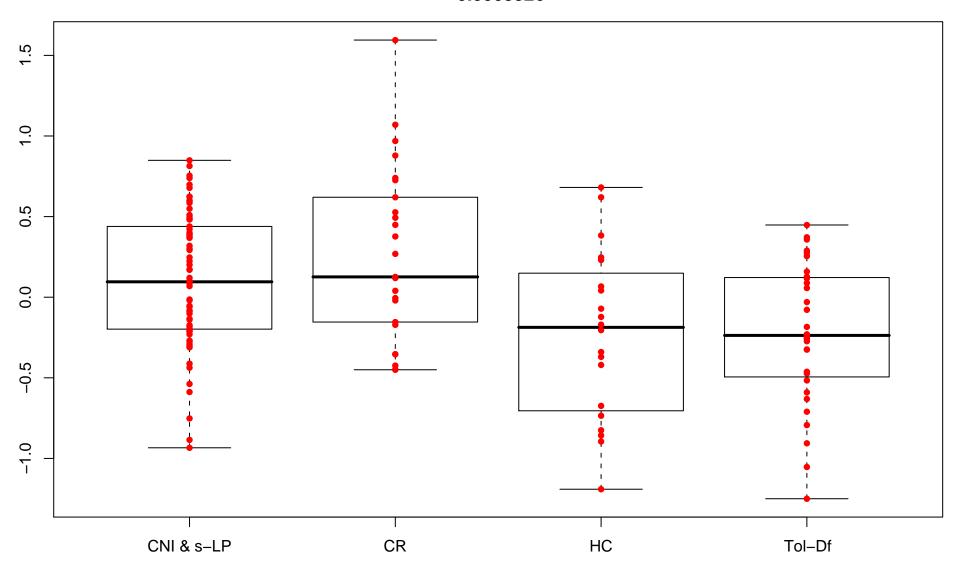
Rank 562 : ARPC4 0.0003496



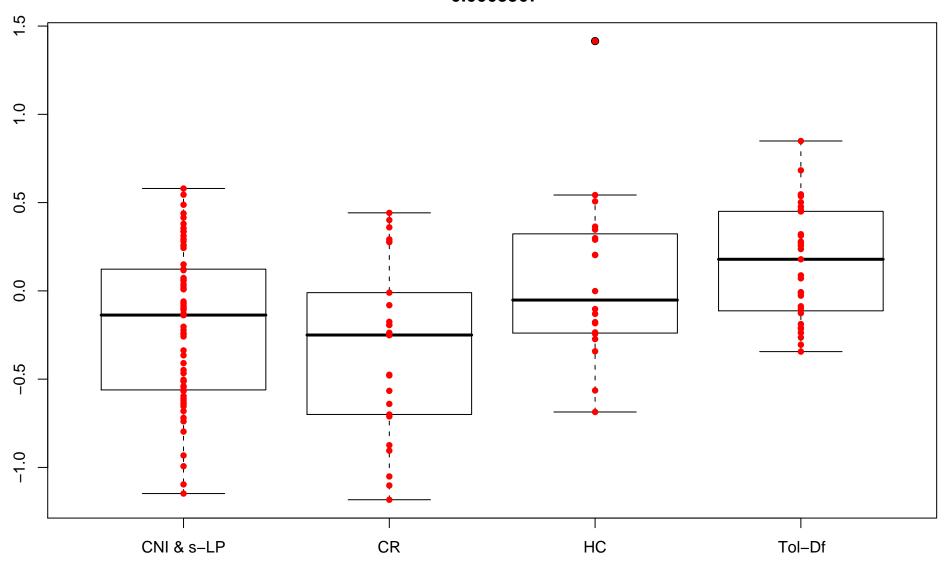
Rank 563 : MAFG;LOC644132 0.0003509



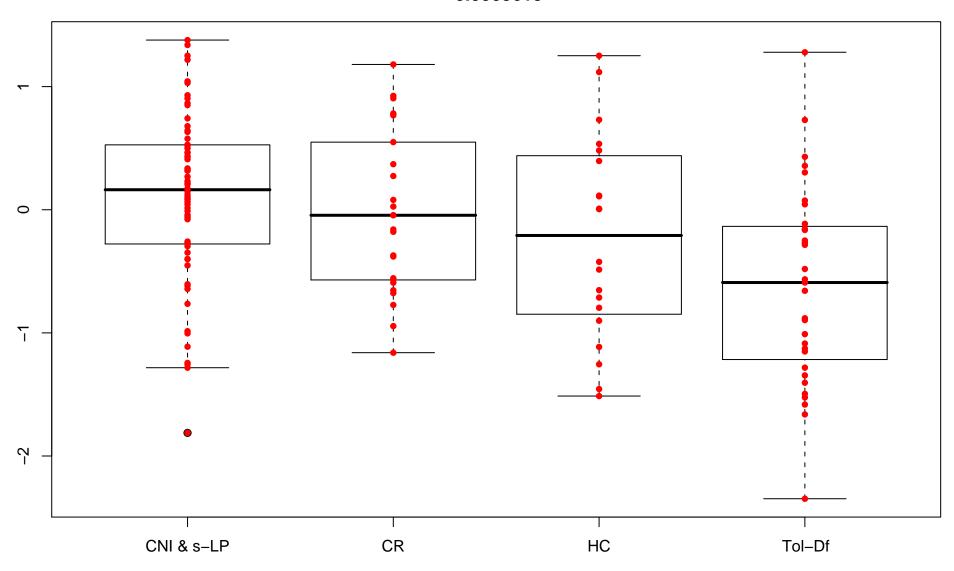
Rank 564 : GABARAPL1 0.0003526



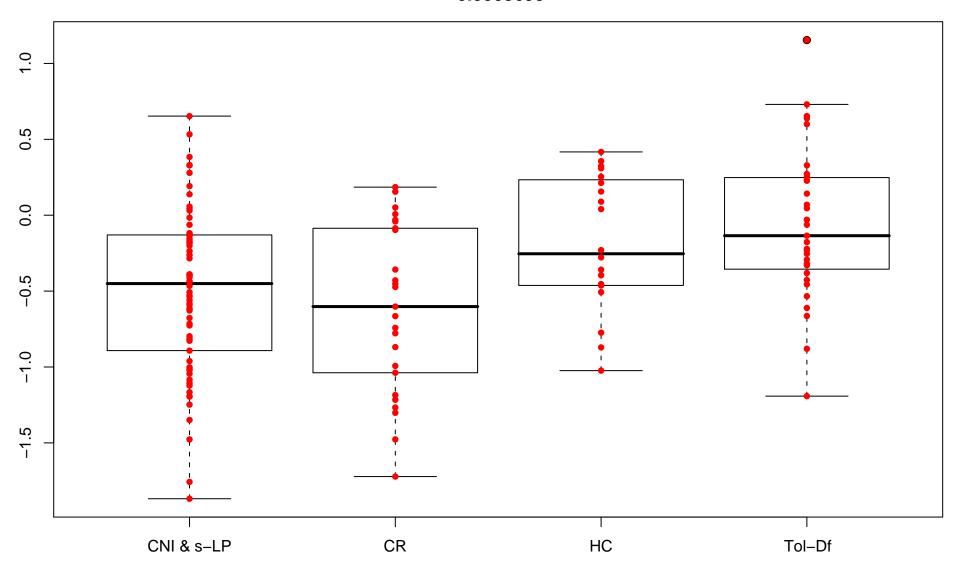
Rank 565 : ELP2 0.0003567



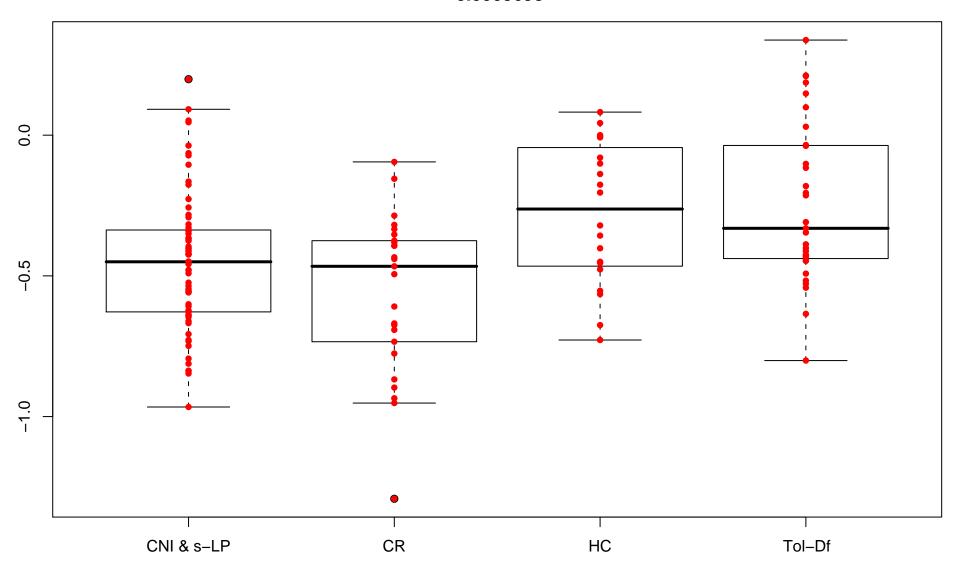
Rank 566 : ACSL1 0.0003615



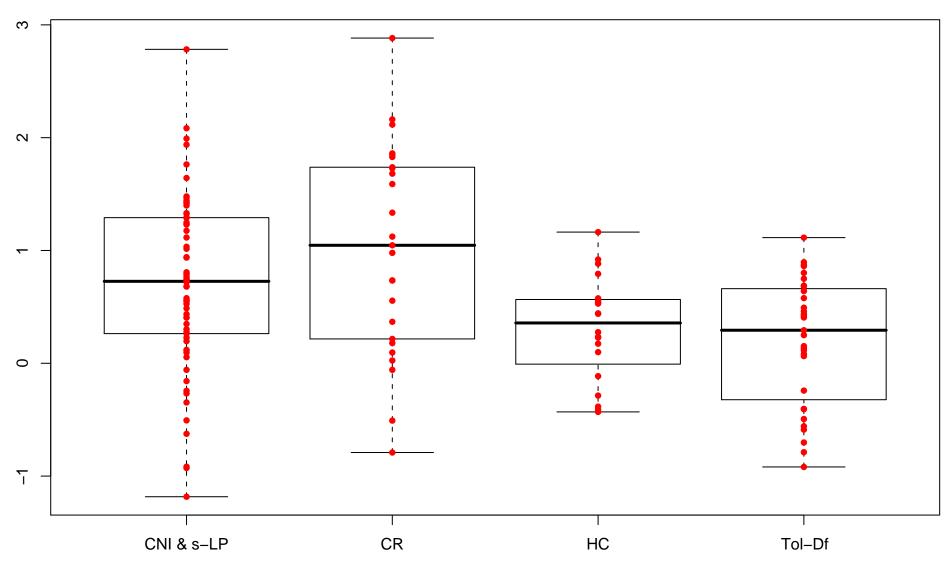
Rank 567: LOC441641 0.0003695



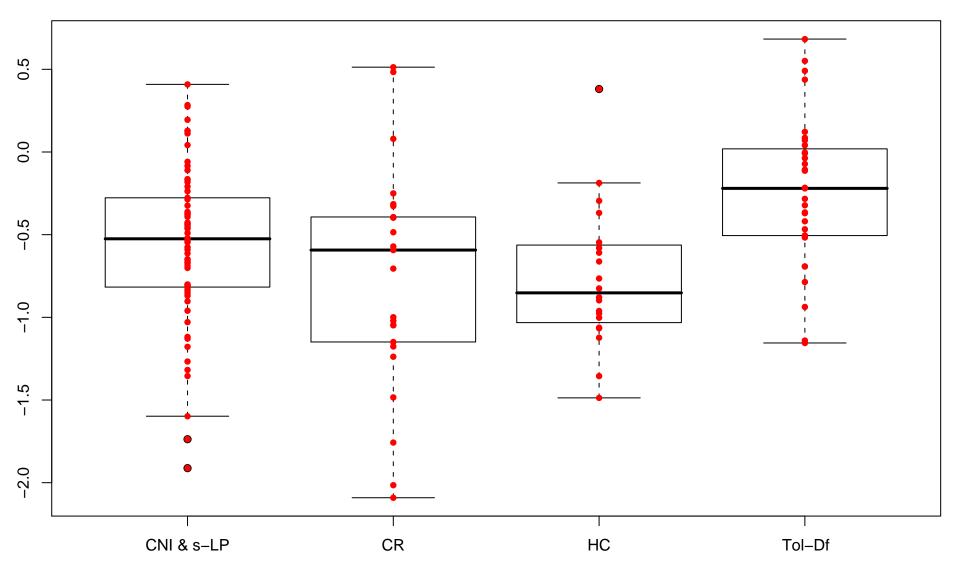
Rank 568 : C19ORF43 0.0003698



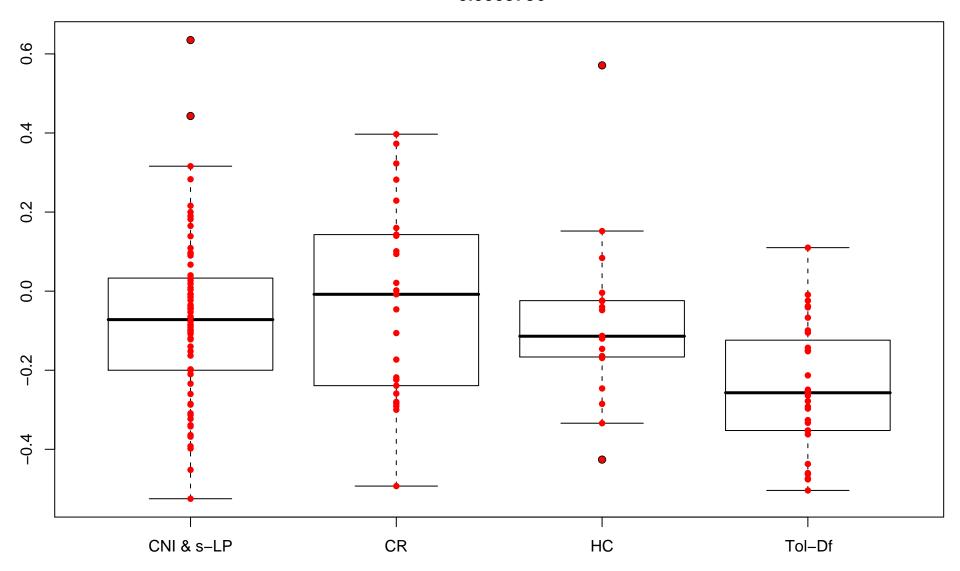
Rank 569 : TSPAN5 0.00037



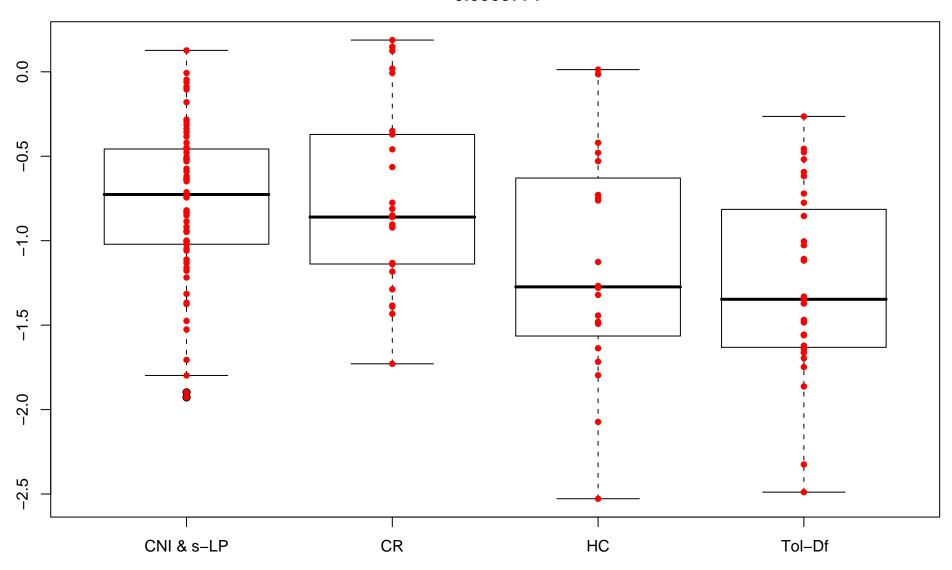
Rank 570 : RORA 0.0003706



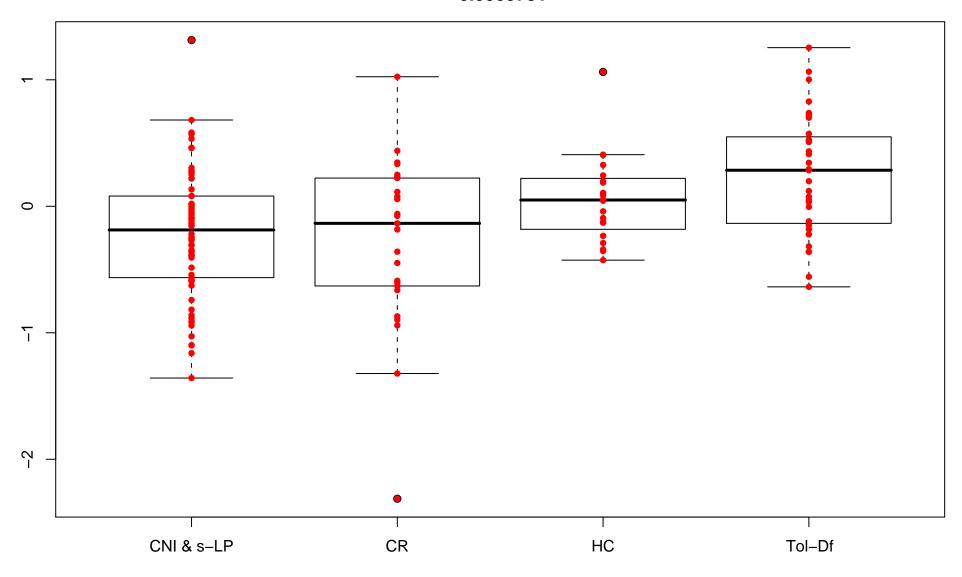
Rank 571 : TRAF7 0.0003736



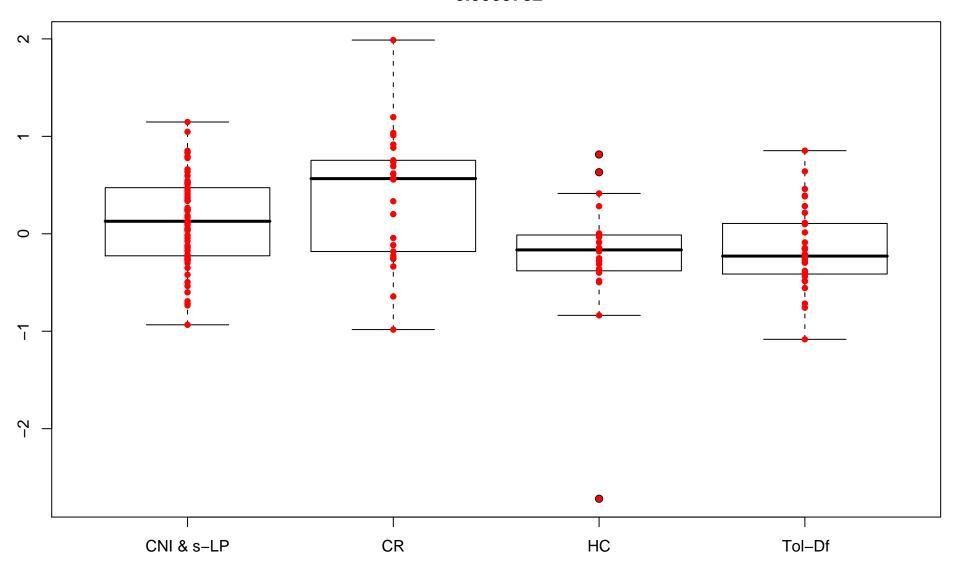
Rank 572 : TLR1 0.0003771



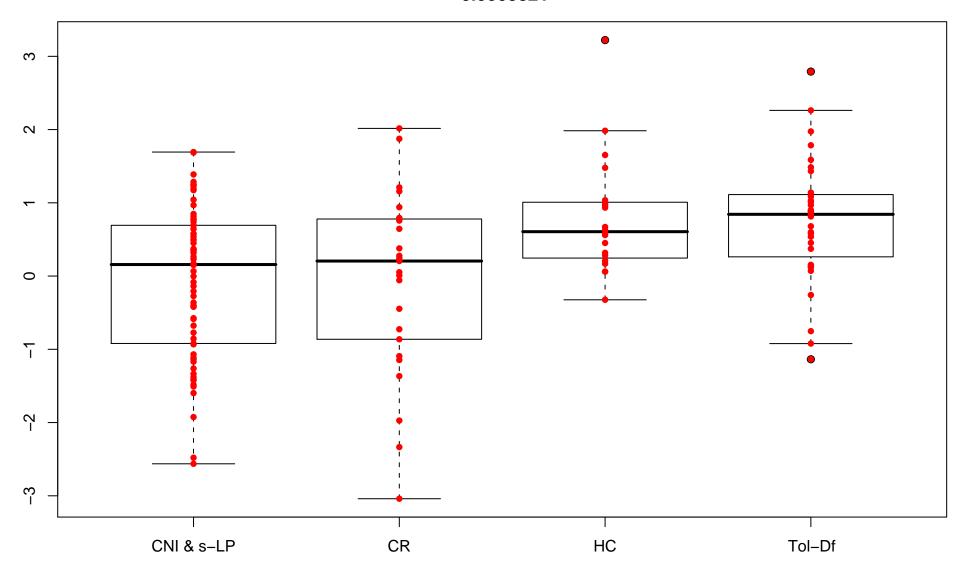
Rank 573 : CD5 0.0003781



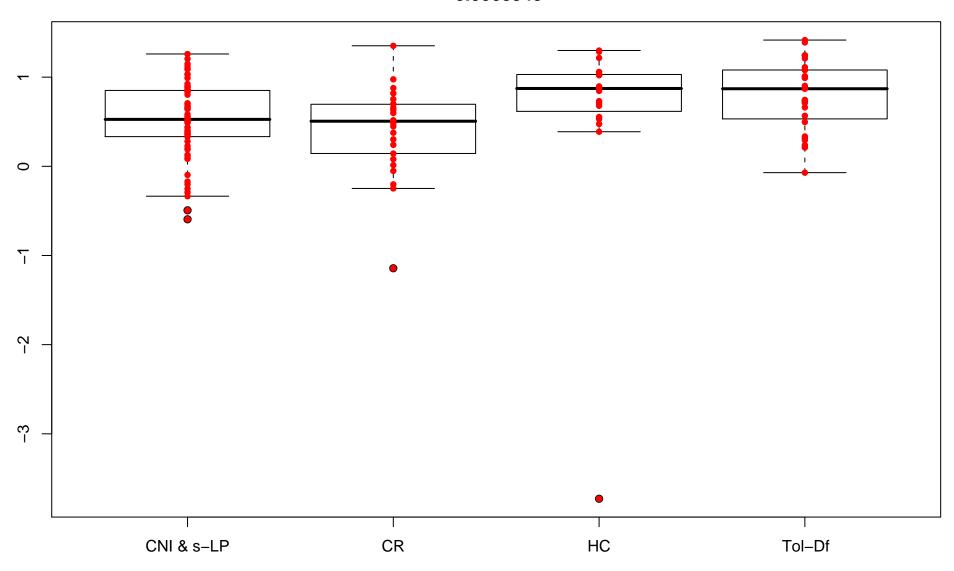
Rank 574 : TUFT1 0.0003782



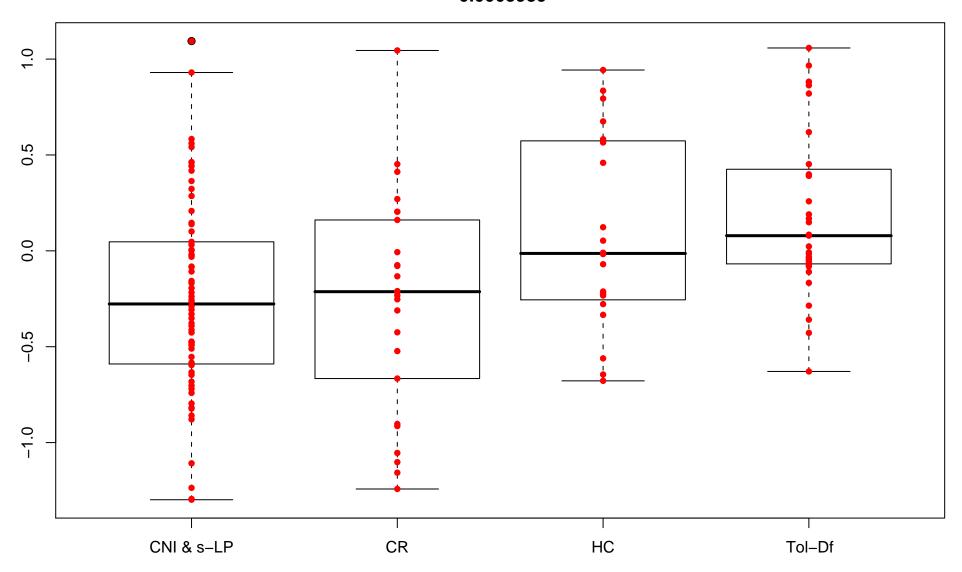
Rank 575 : CCR6 0.0003821



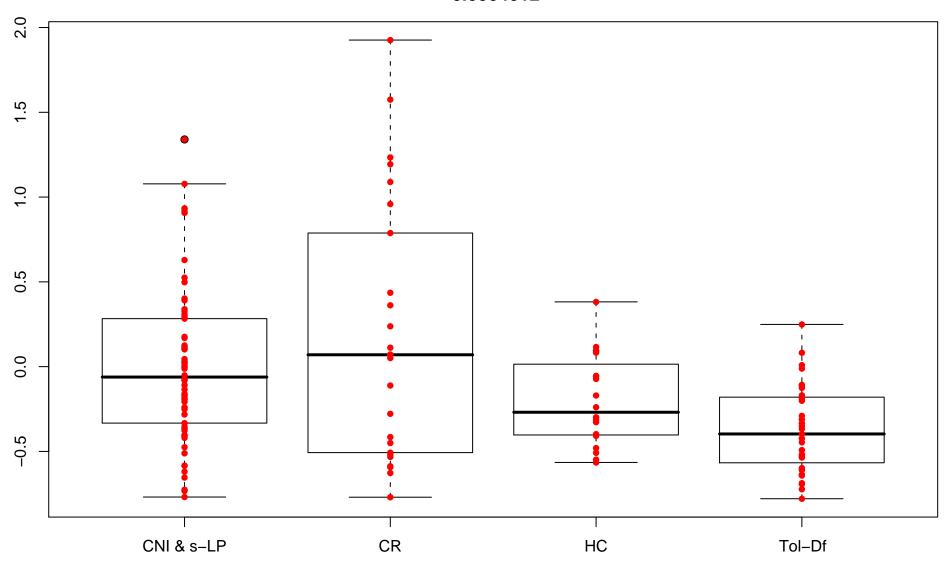
Rank 576 : GCC2 0.0003949



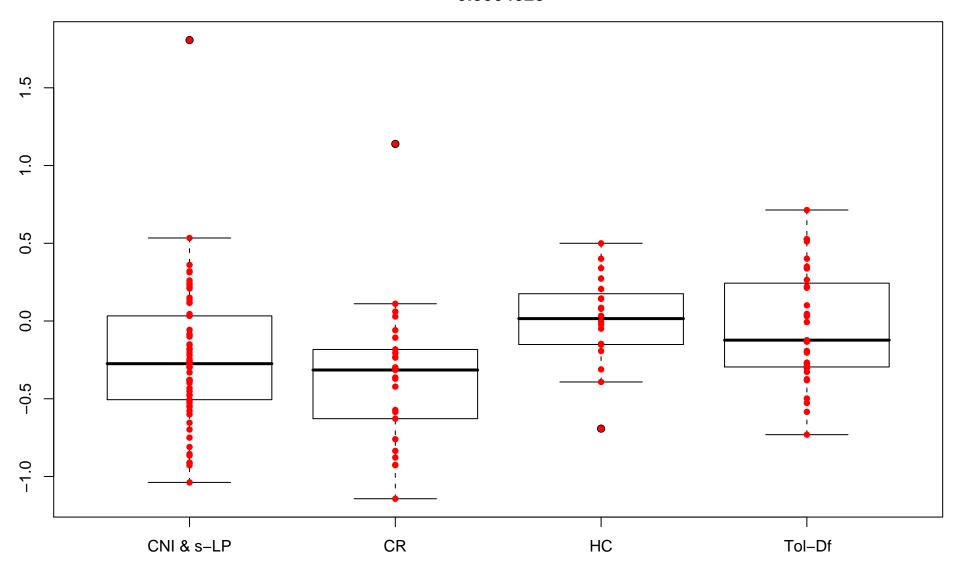
Rank 577 : ACOT2 0.0003989



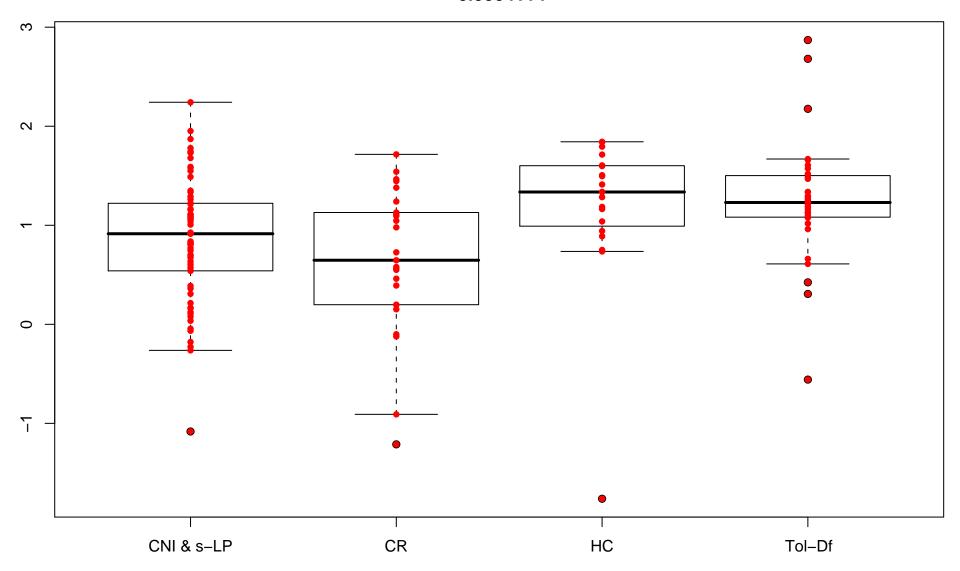
Rank 578 : C1ORF26 0.0004012



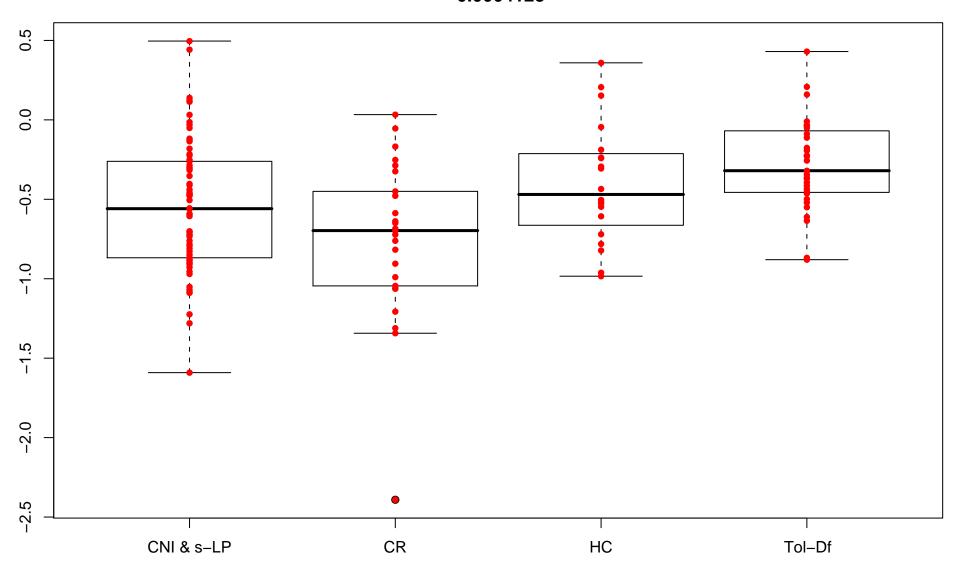
Rank 579 : PCNA 0.0004023



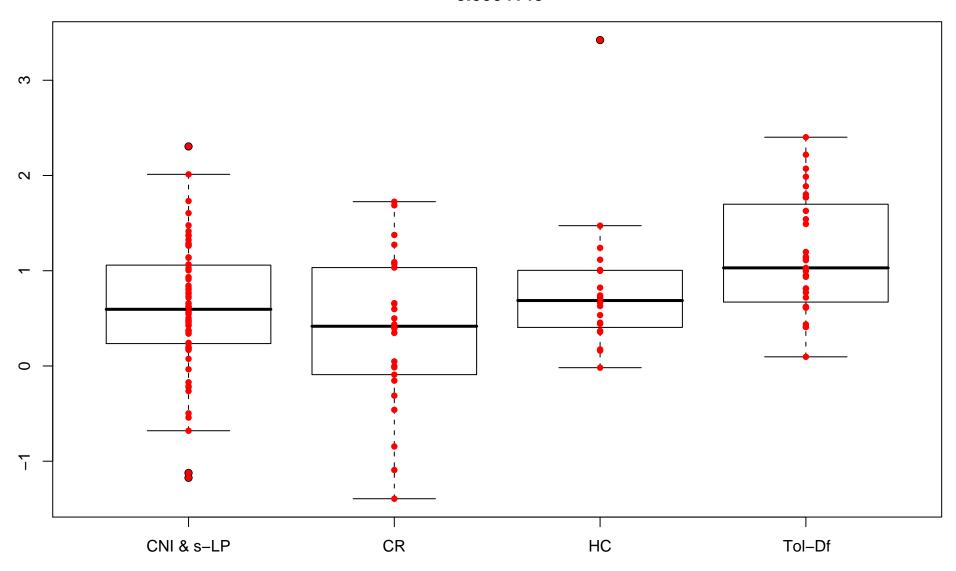
Rank 580 : IL2RB 0.0004114



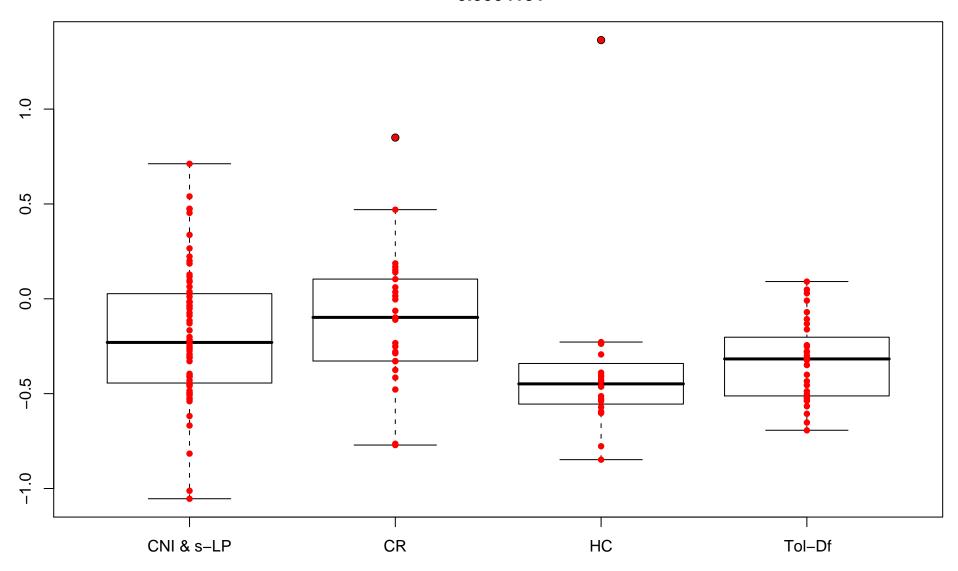
Rank 581 : CCDC98;MRPS18C 0.0004128



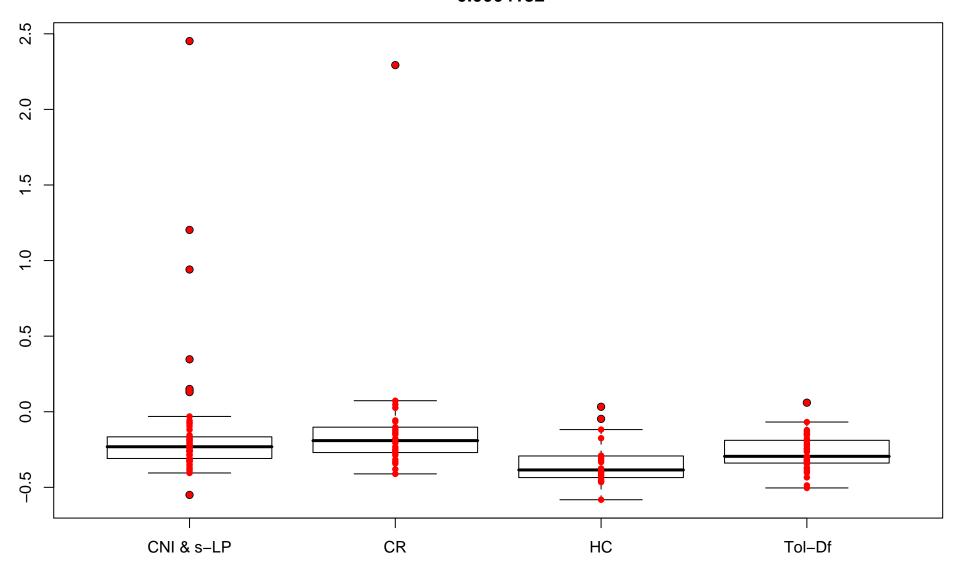
Rank 582 : GATA3 0.0004143



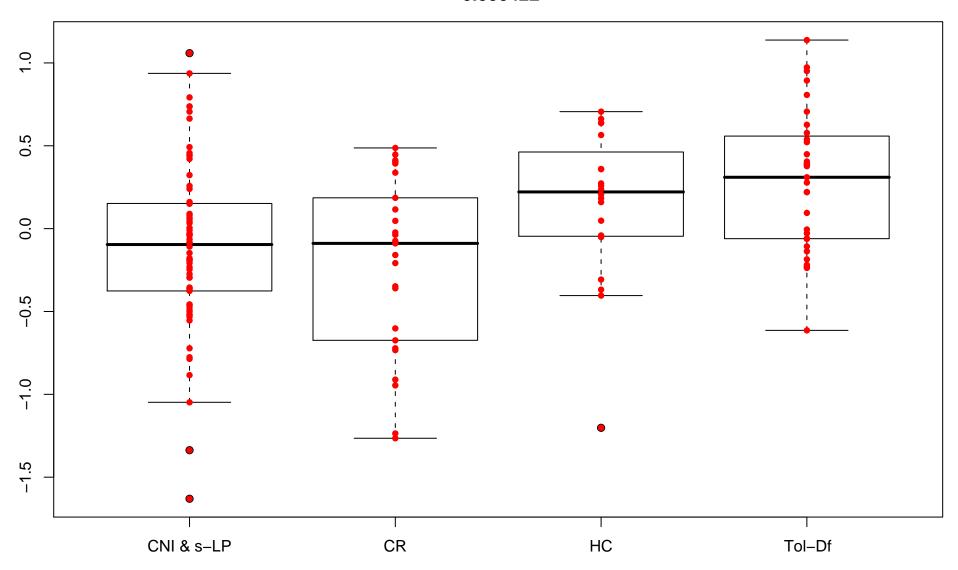
Rank 583 : ALDH4A1 0.0004151



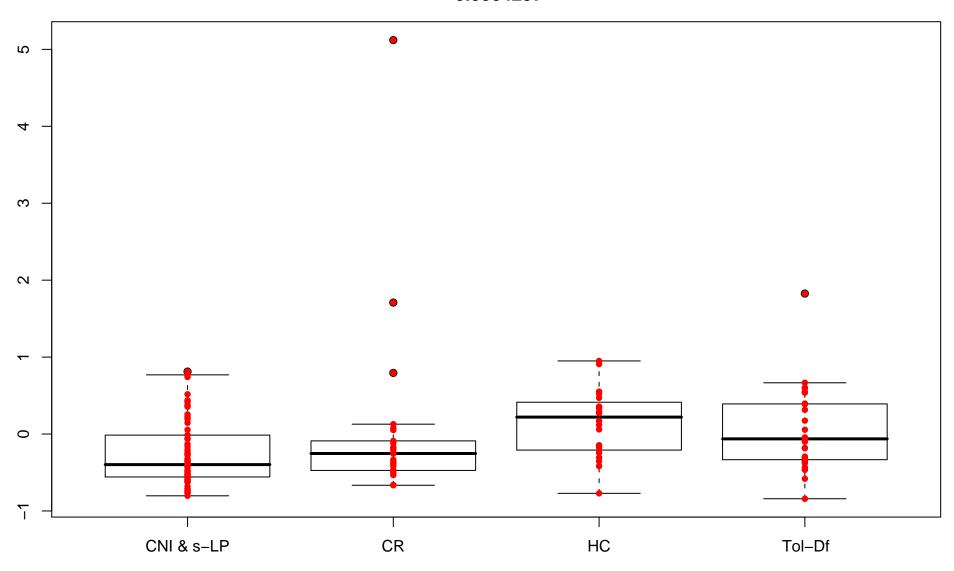
Rank 584 : Al378923 0.0004182



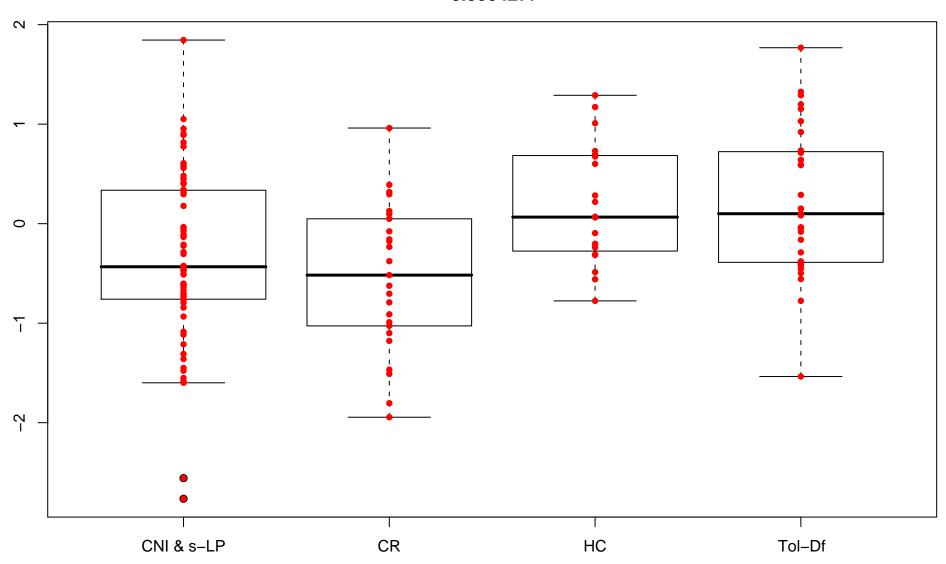
Rank 585 : APEX1 0.000422



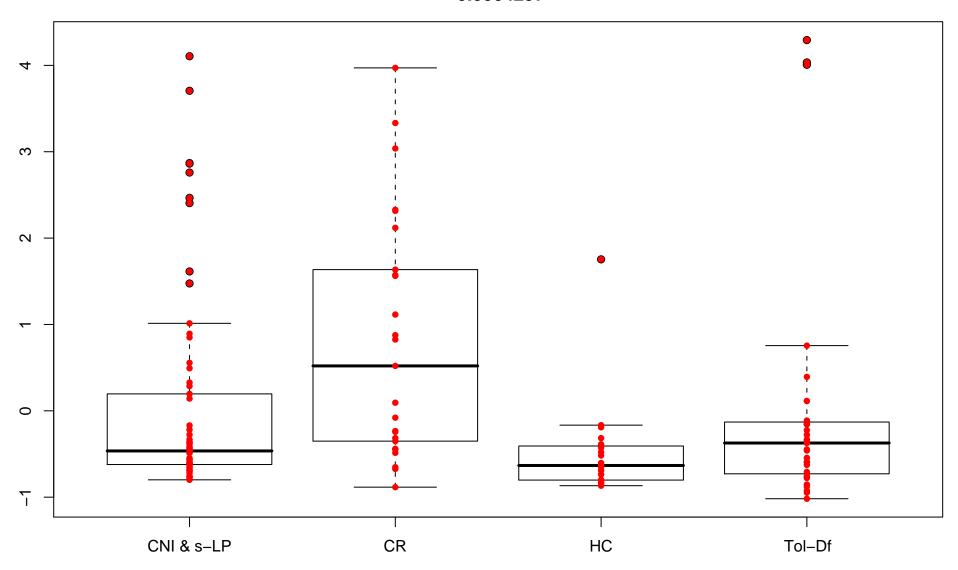
Rank 586 : ZNF547 0.0004257



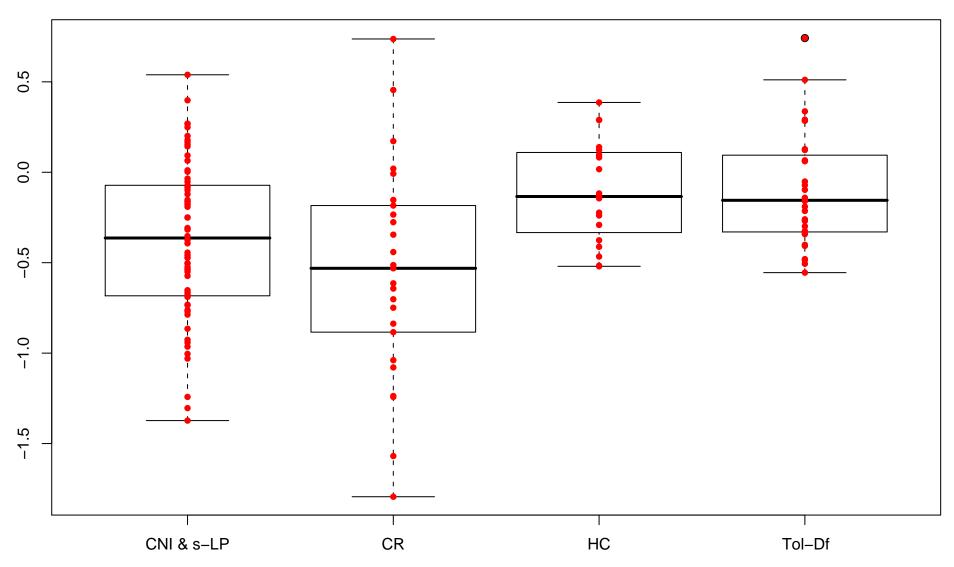
Rank 587 : MAL 0.0004277



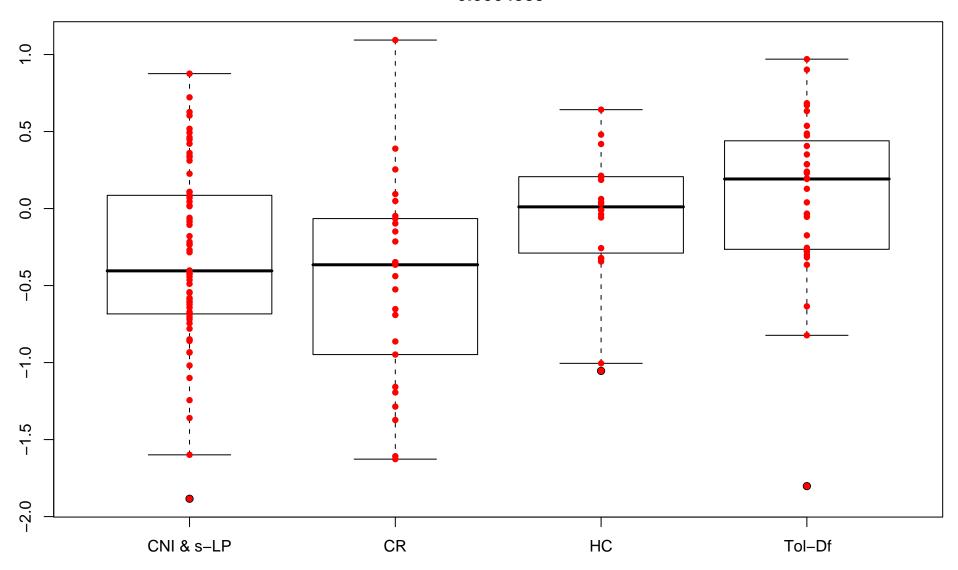
Rank 588 : FN1 0.0004297



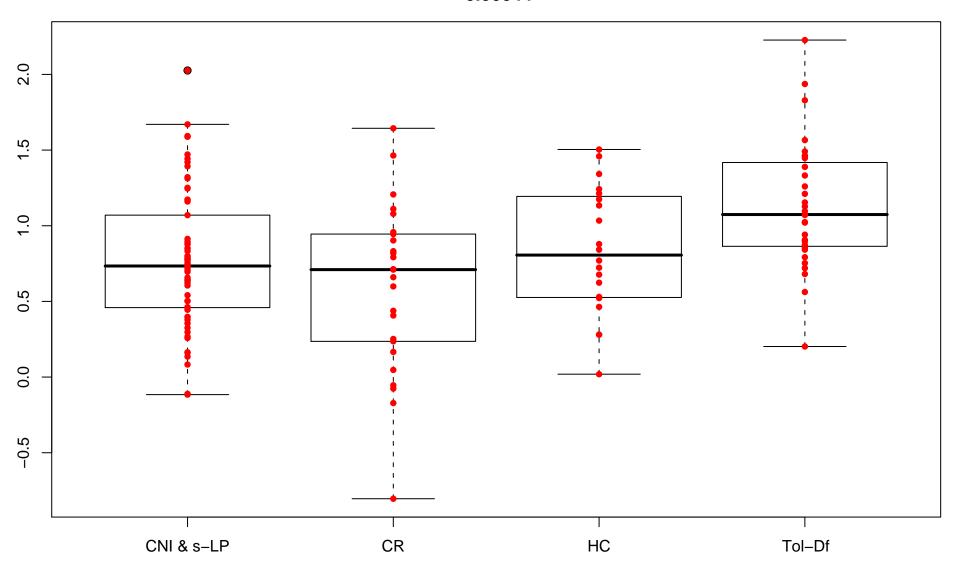
Rank 589 : KIF3A 0.000438



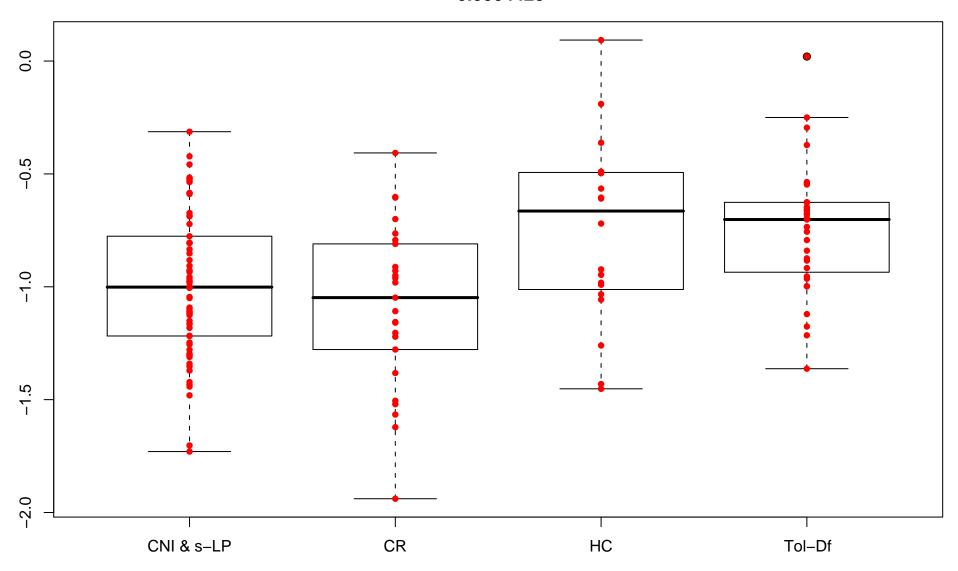
Rank 590 : FAIM 0.0004389



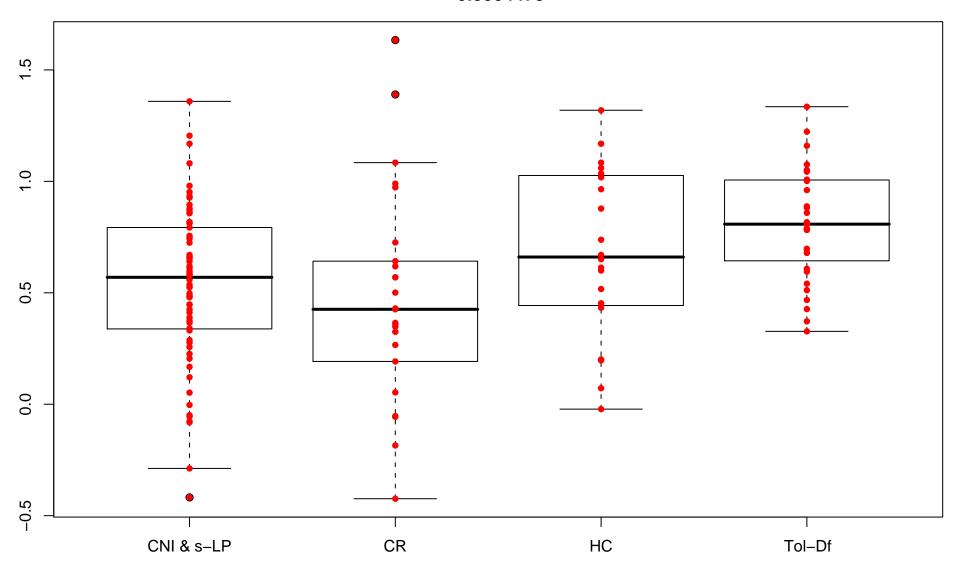
Rank 591 : CAD 0.00044



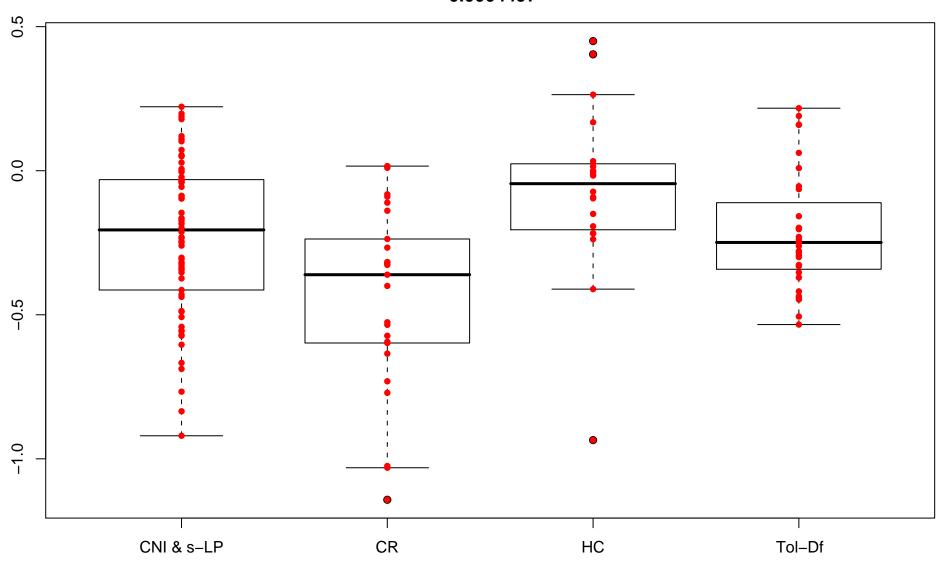
Rank 592 : SSR4 0.0004425



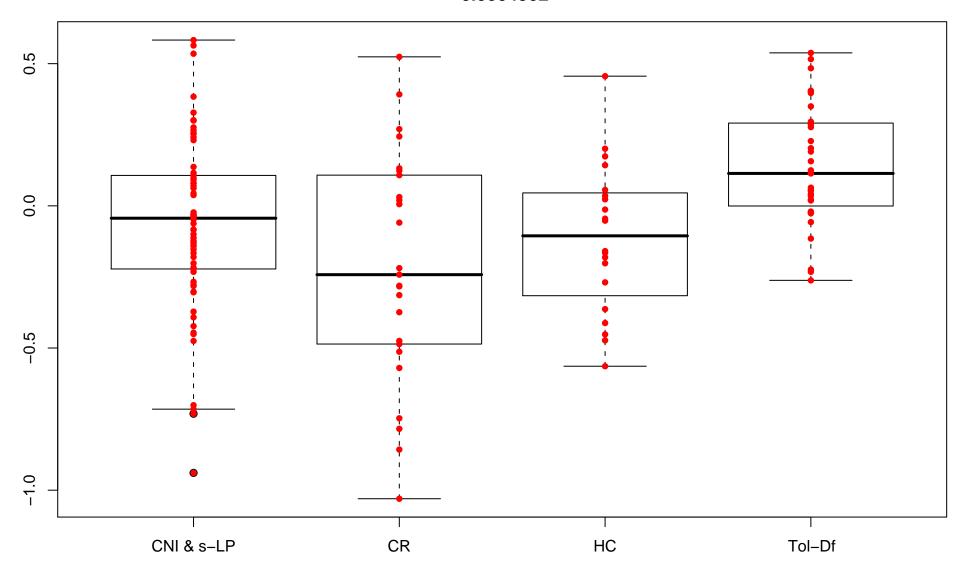
Rank 593 : UCKL1 0.0004475



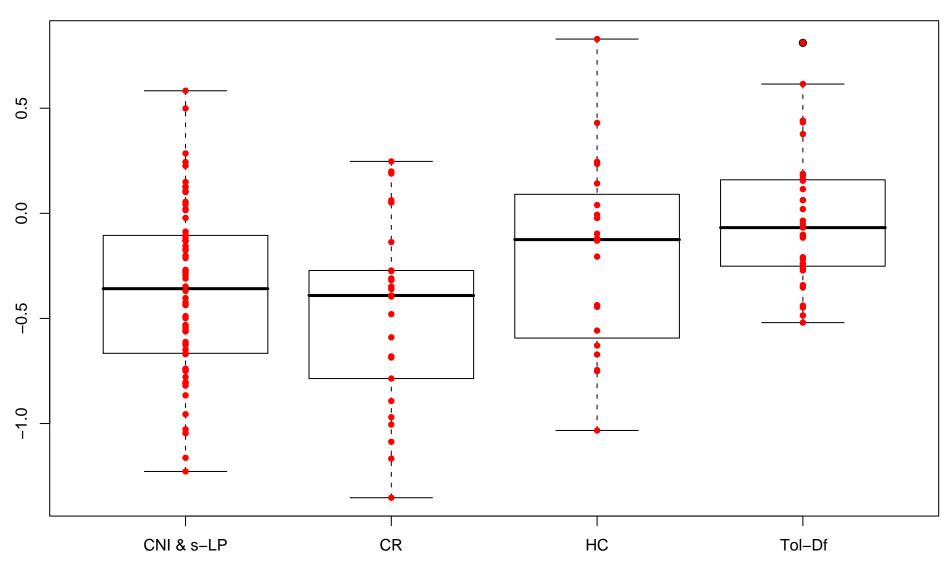
Rank 594 : C14ORF129 0.0004497



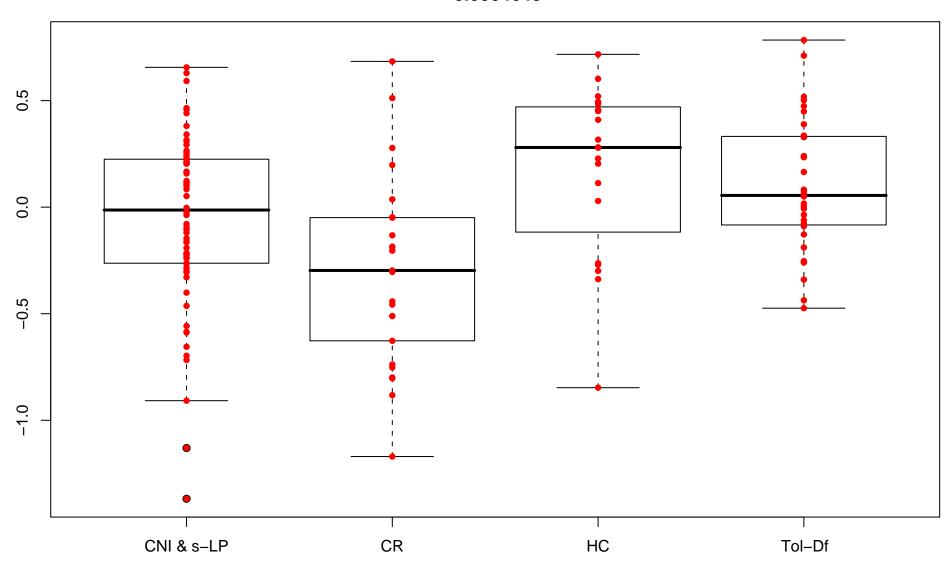
Rank 595 : GLS 0.0004502



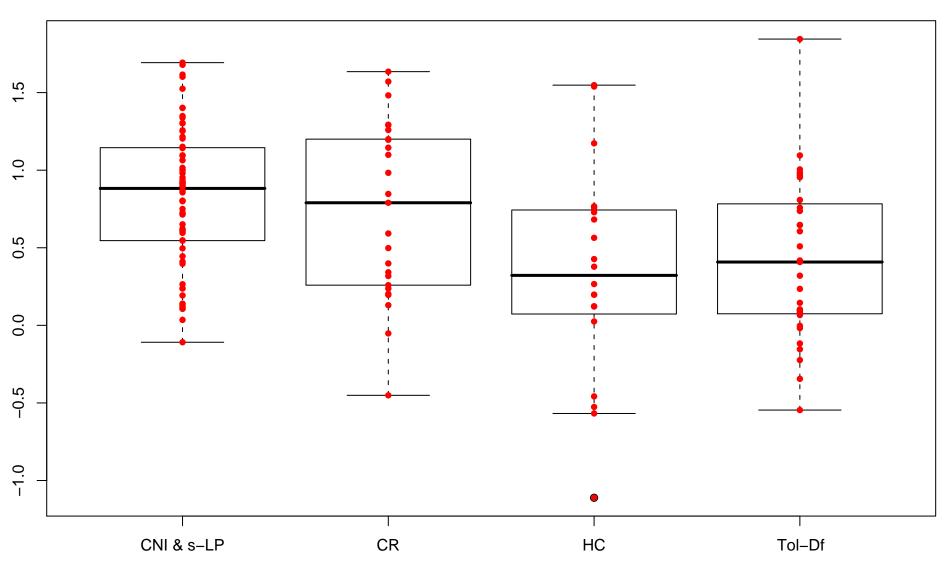
Rank 596 : COX6C 0.0004543



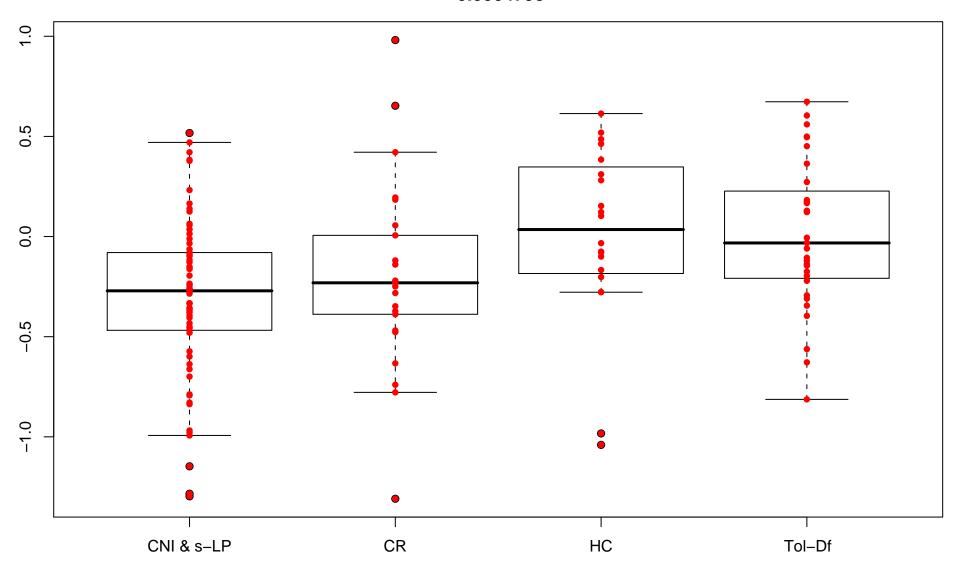
Rank 597 : NGFRAP1 0.0004645



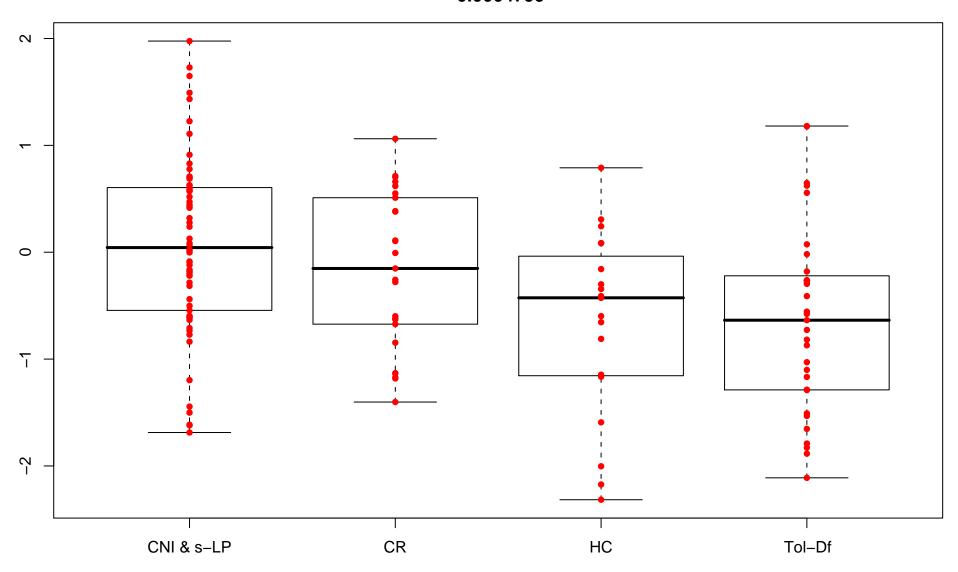
Rank 598 : ITGAX 0.0004788



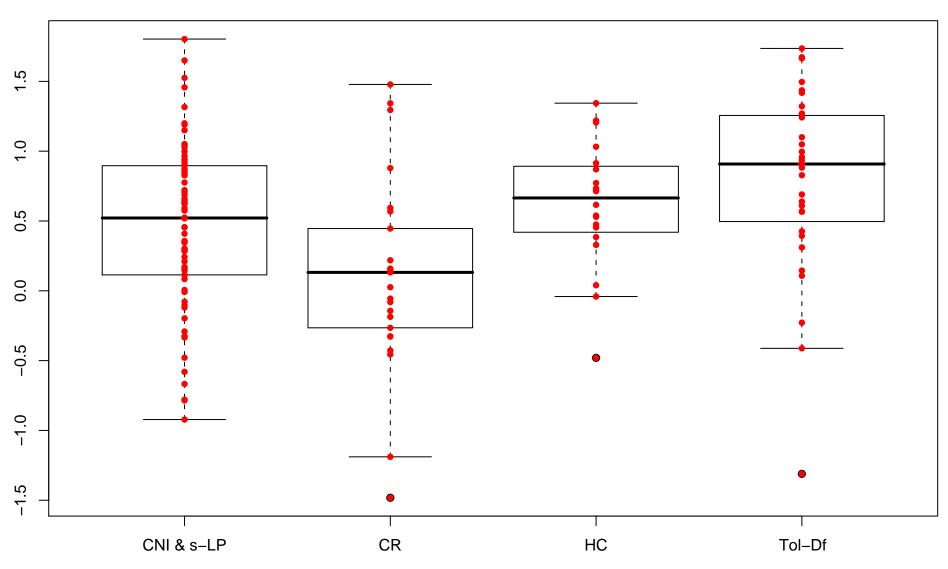
Rank 599 : ALS2CR13 0.0004793



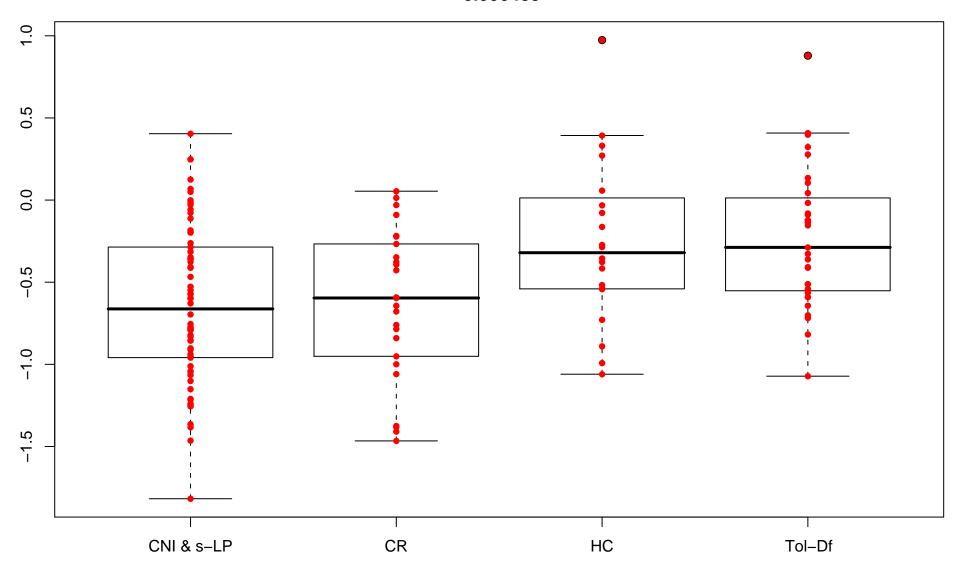
Rank 600 : CA4 0.0004799



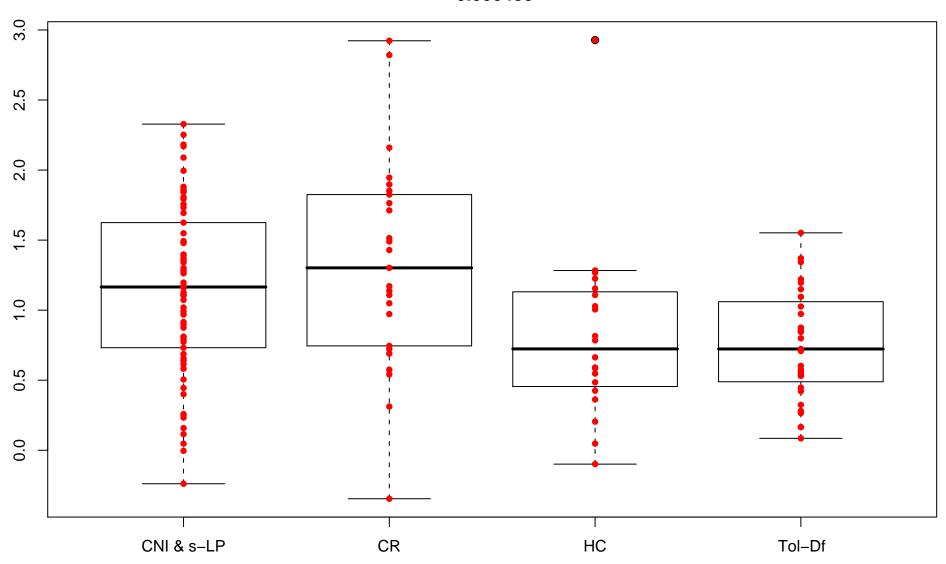
Rank 601 : ABCB1 0.0004824



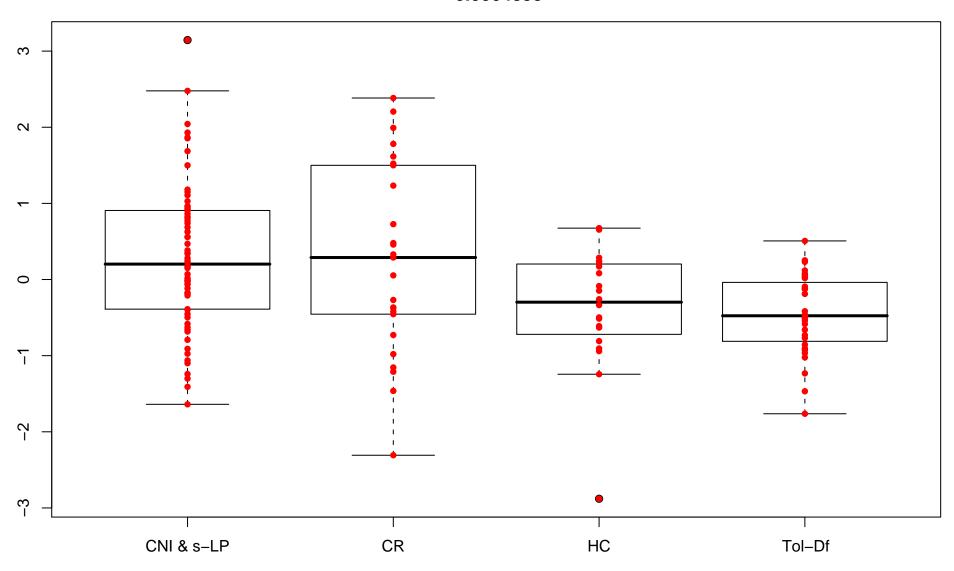
Rank 602 : SOD1 0.000483



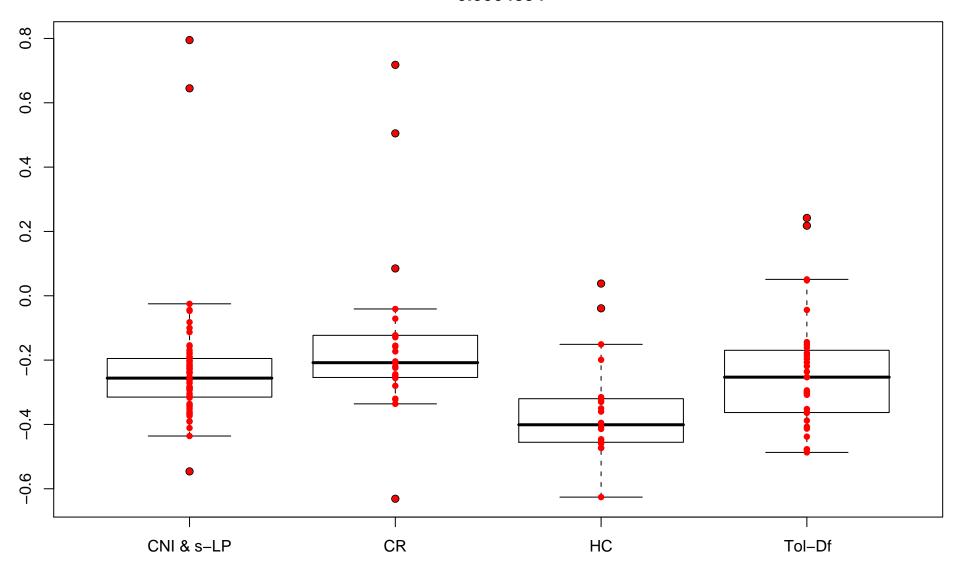
Rank 603 : PIP4K2A 0.000483



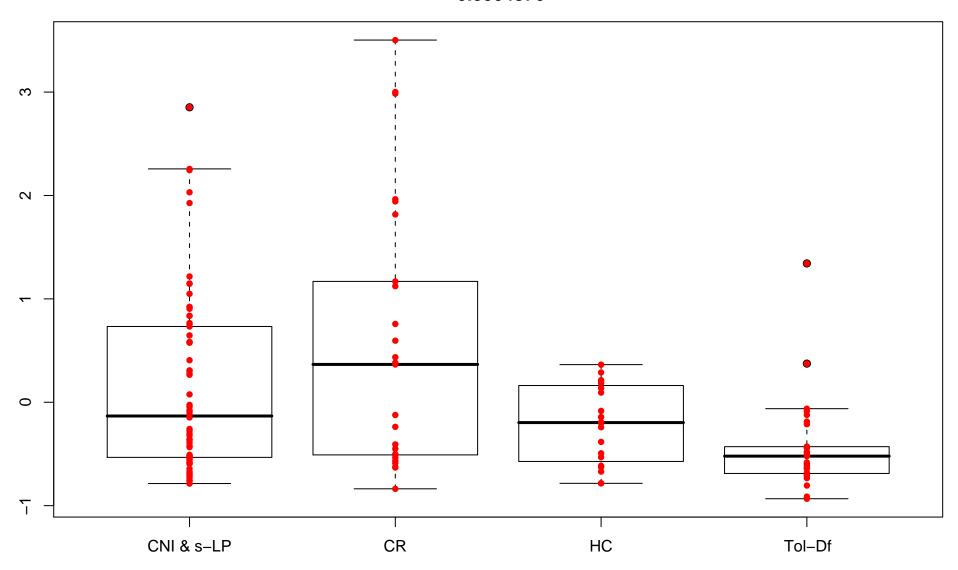
Rank 604 : AF263545 0.0004853



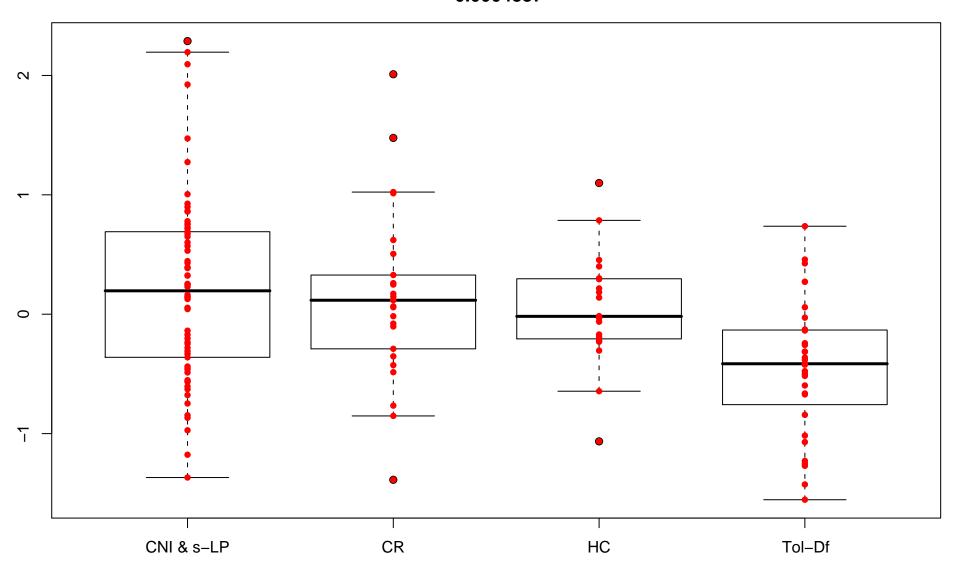
Rank 605 : ZNF804A 0.0004854



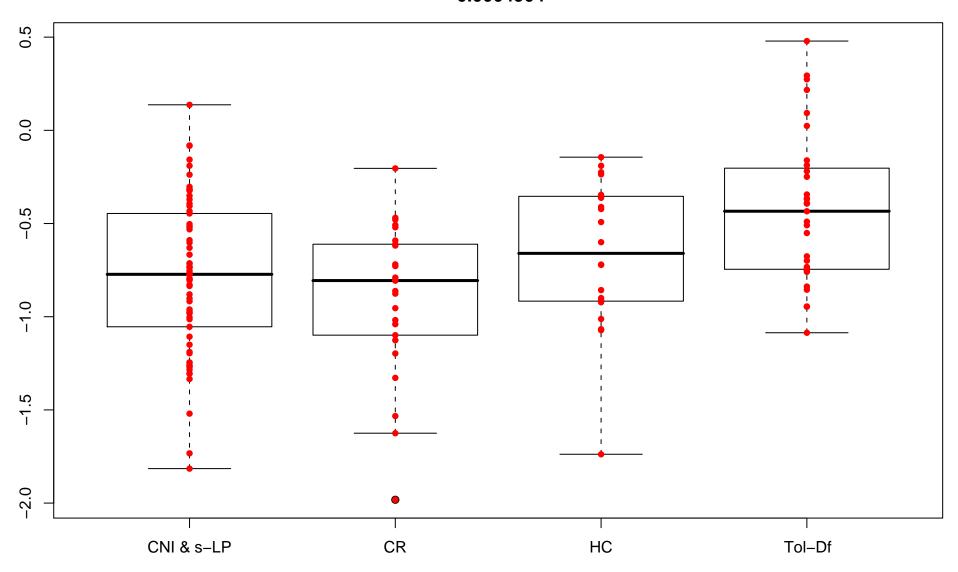
Rank 606 : TACSTD1 0.0004876

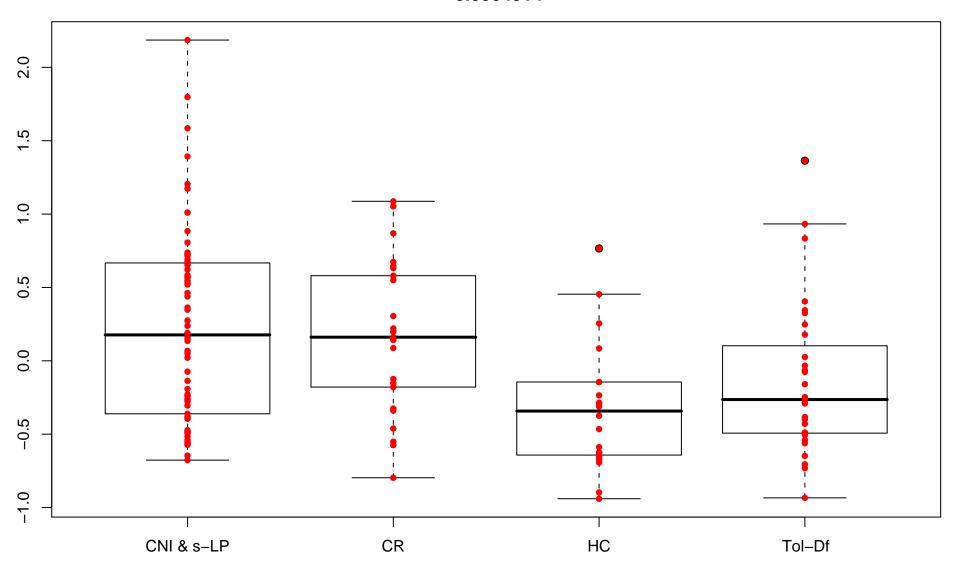


Rank 607 : CLEC5A 0.0004887

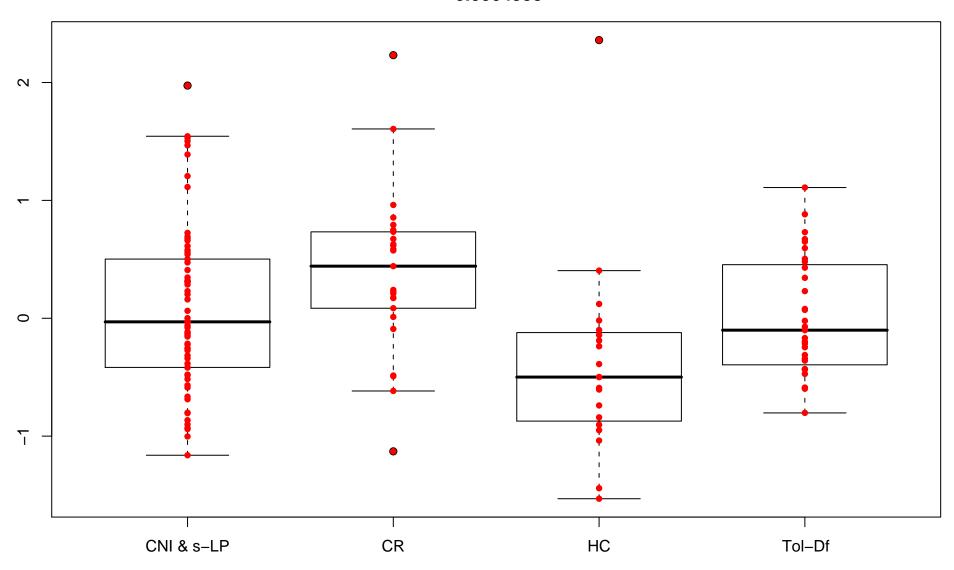


Rank 608 : ID3 0.0004904

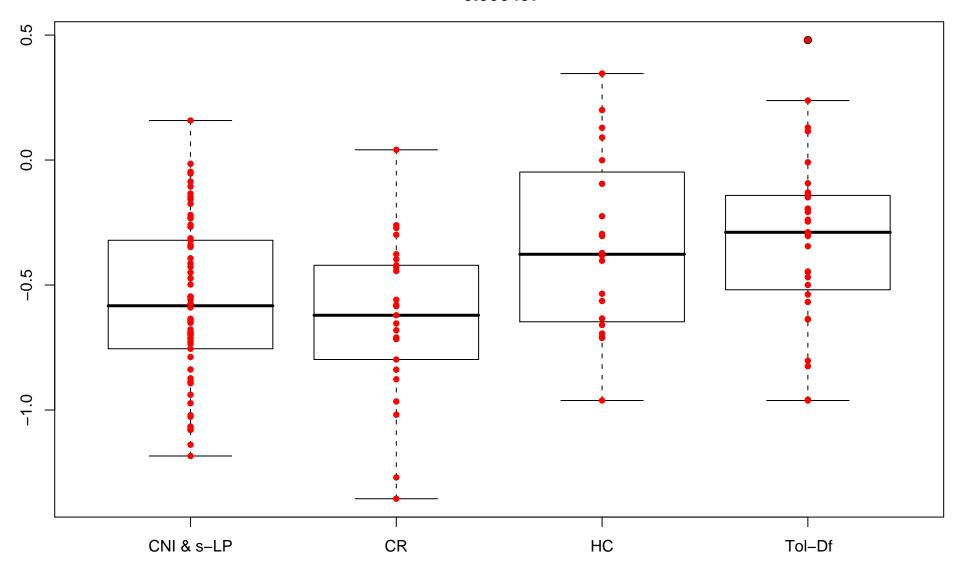




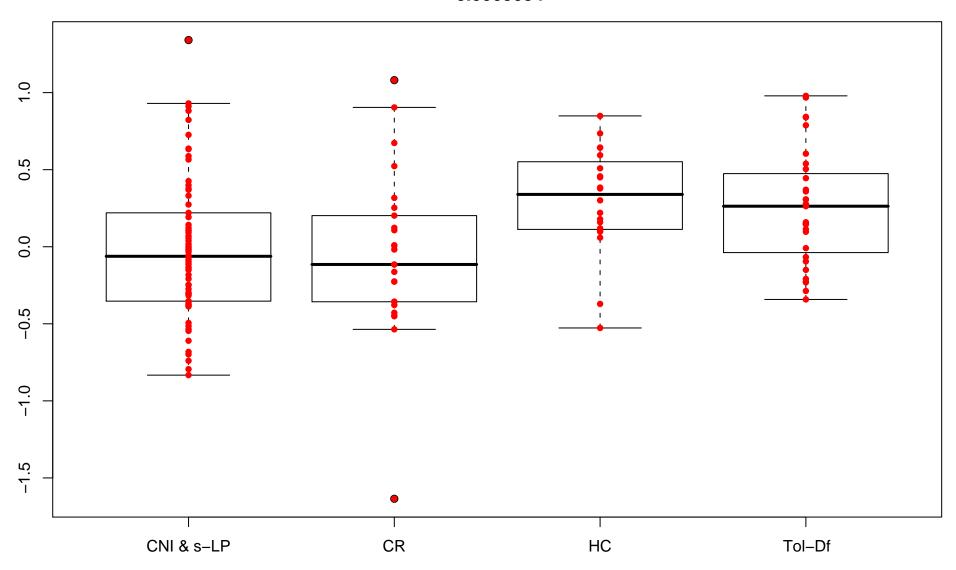
Rank 610 : MT2A 0.0004955



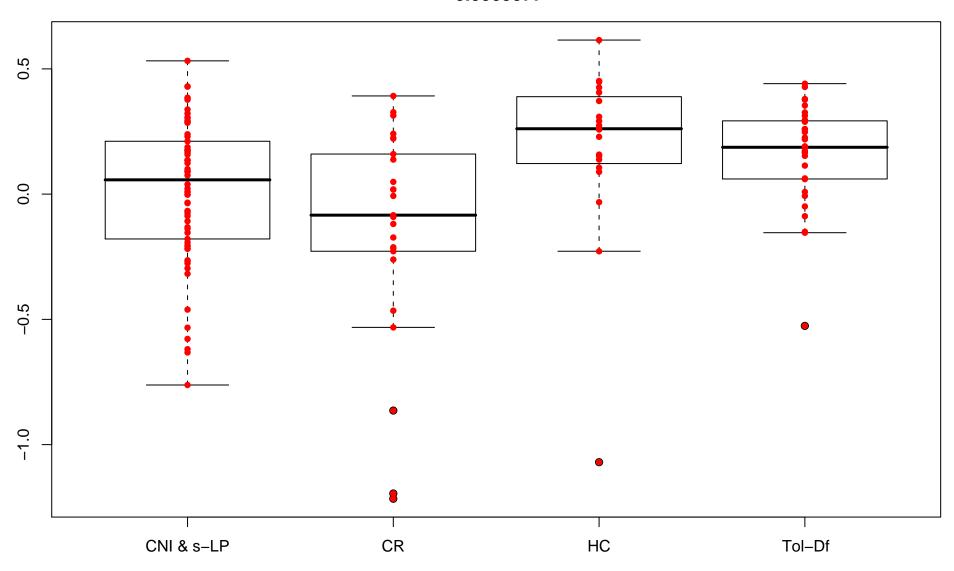
Rank 611 : ZDHHC4 0.000497



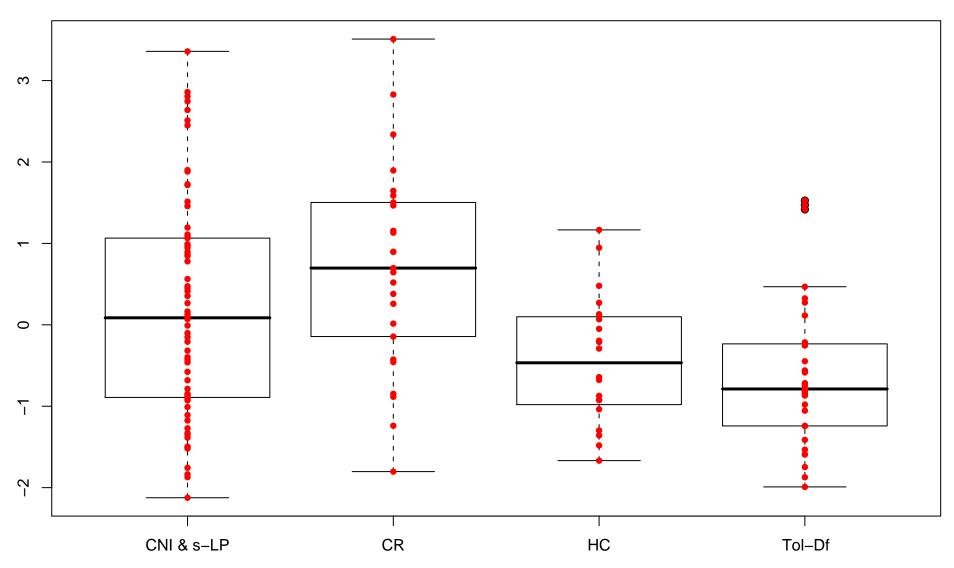
Rank 612 : TLOC1 0.0005034



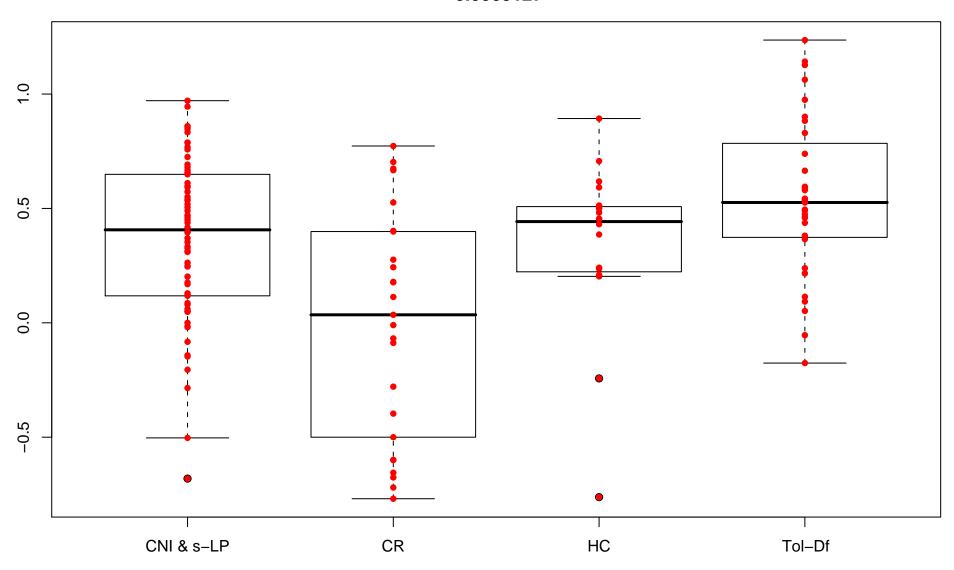
Rank 613 : C5ORF37 0.0005077



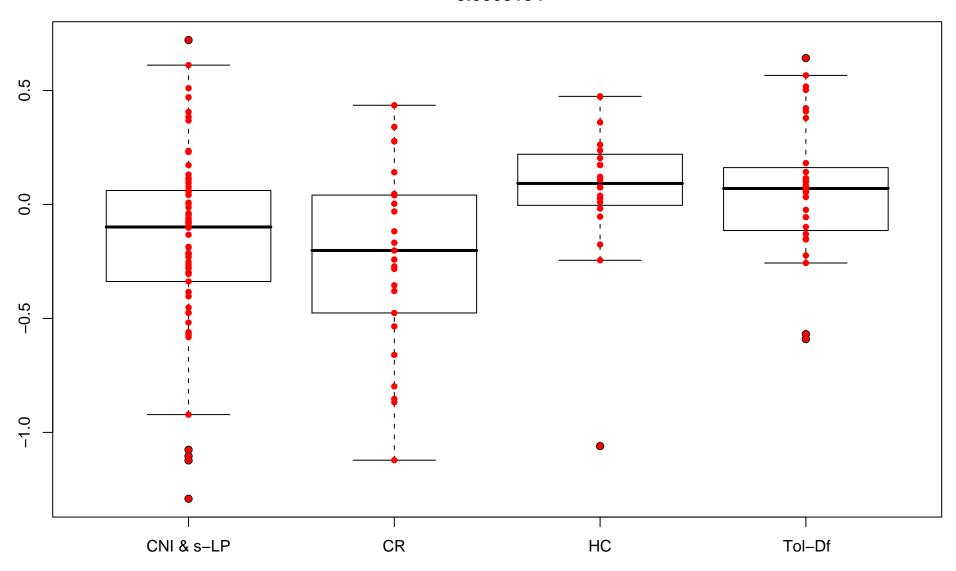
Rank 614 : PGM5 0.0005105



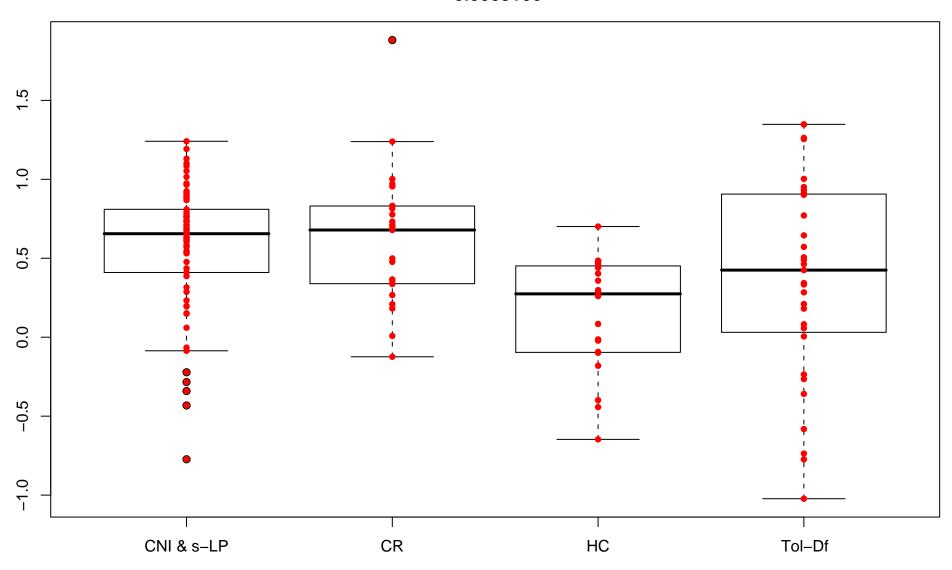
Rank 615: MTERFD2 0.0005127



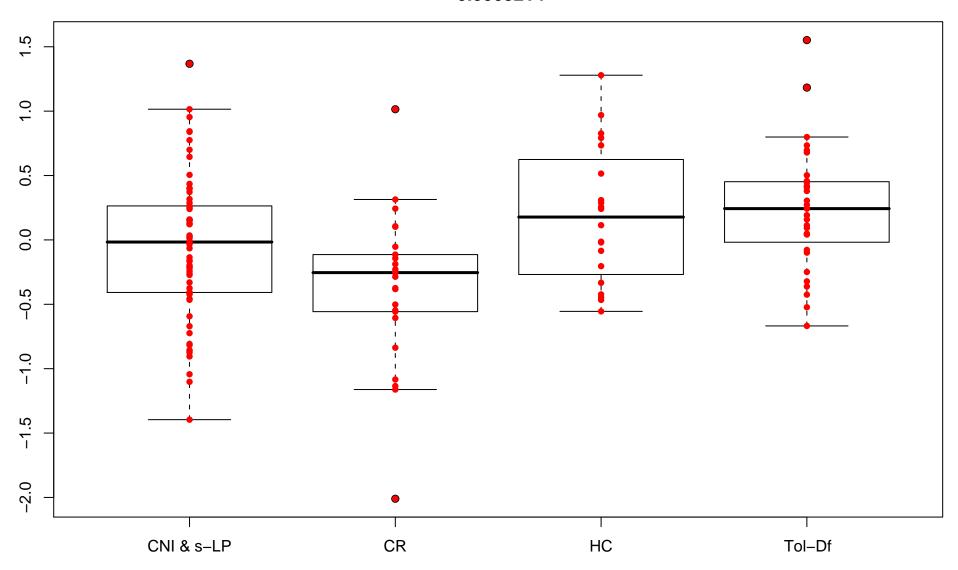
Rank 616 : GTL3 0.0005154



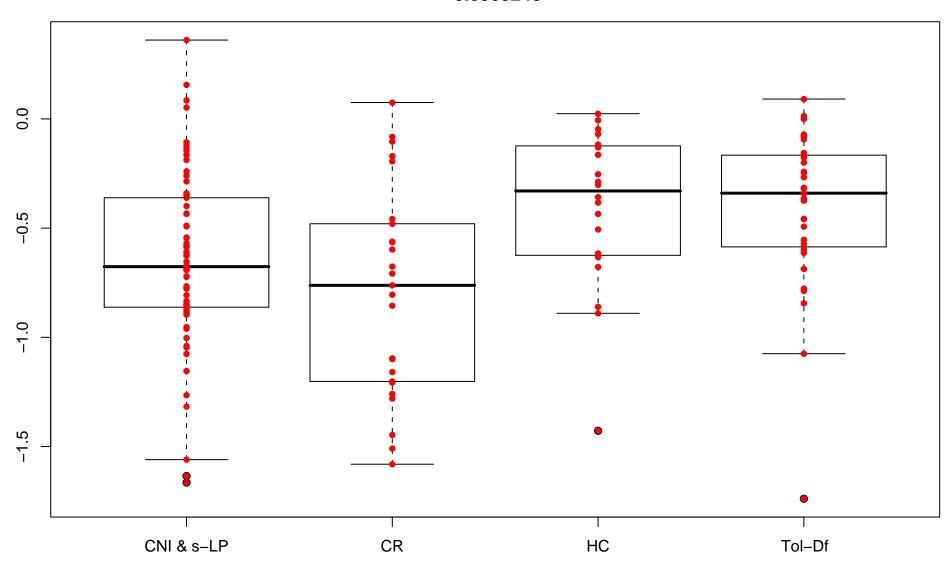
Rank 617 : AK094334 0.0005166



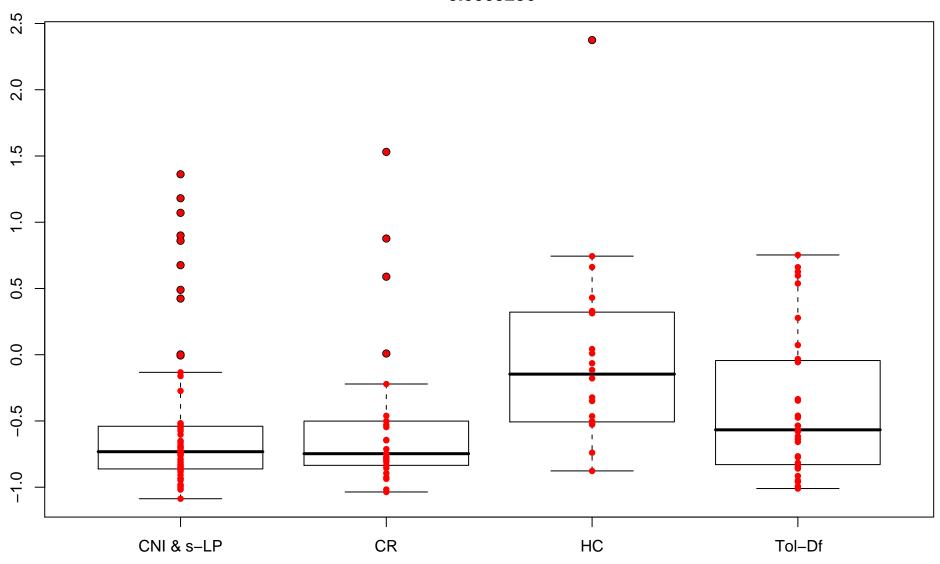
Rank 618 : CCR5 0.0005214



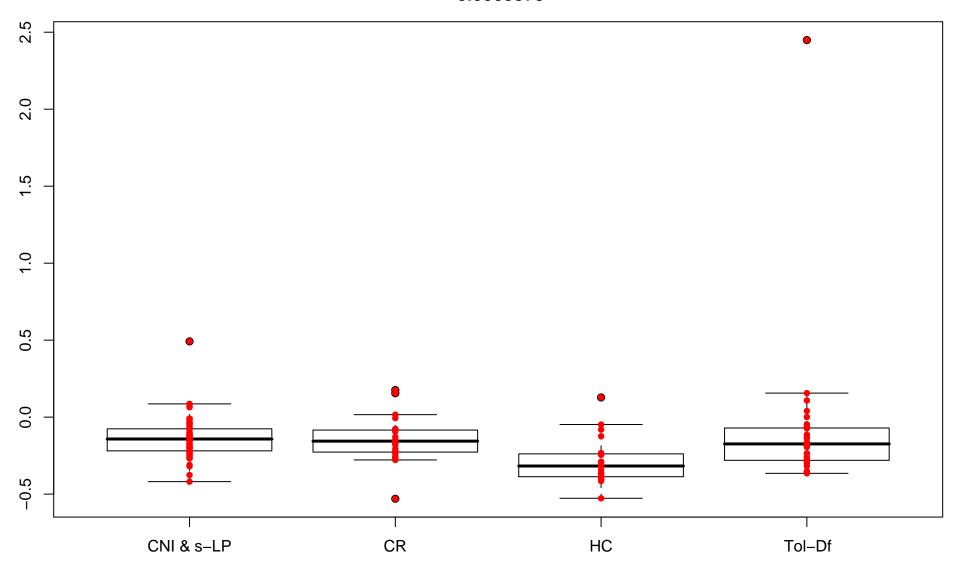
Rank 619 : RBM3 0.0005248



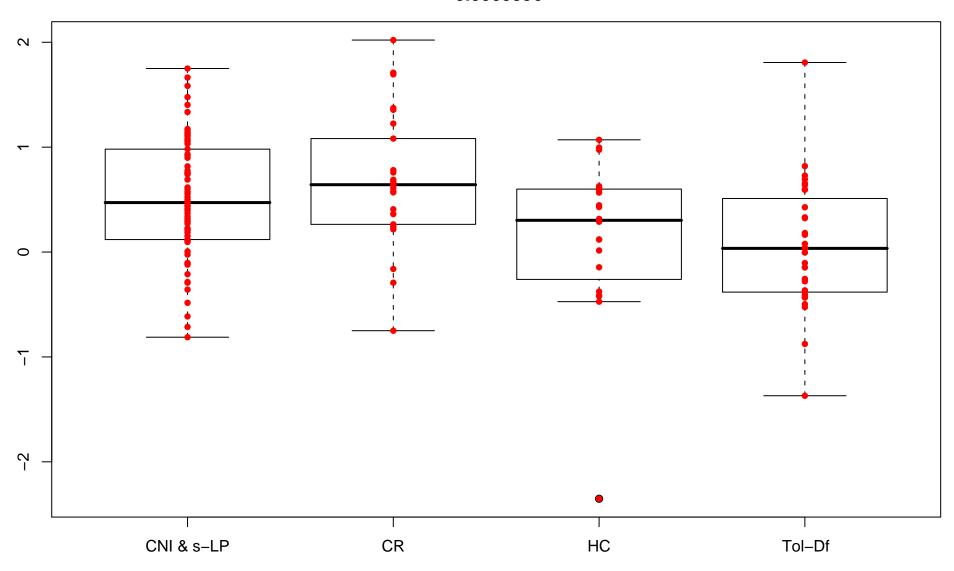
Rank 620 : AK095831 0.0005286



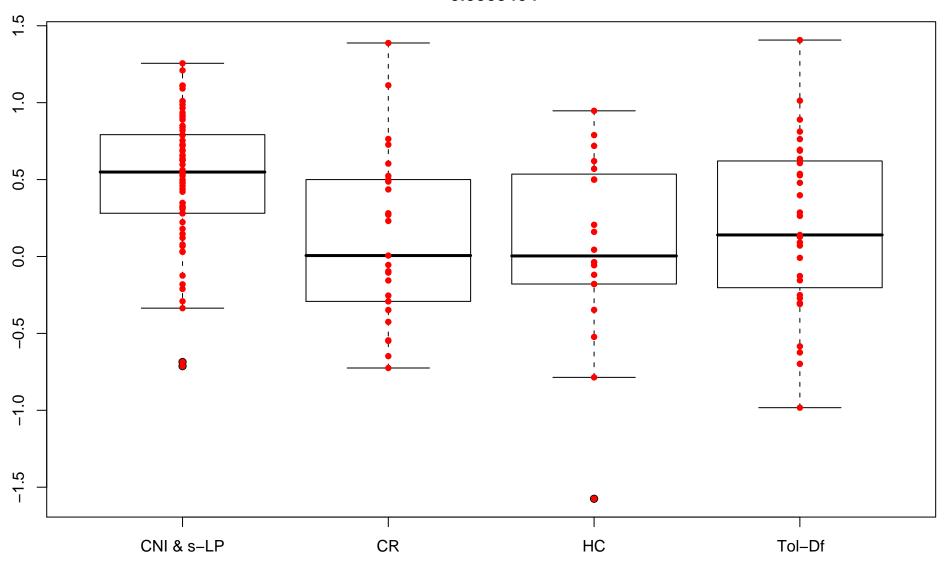
Rank 621 : AF116673 0.0005379



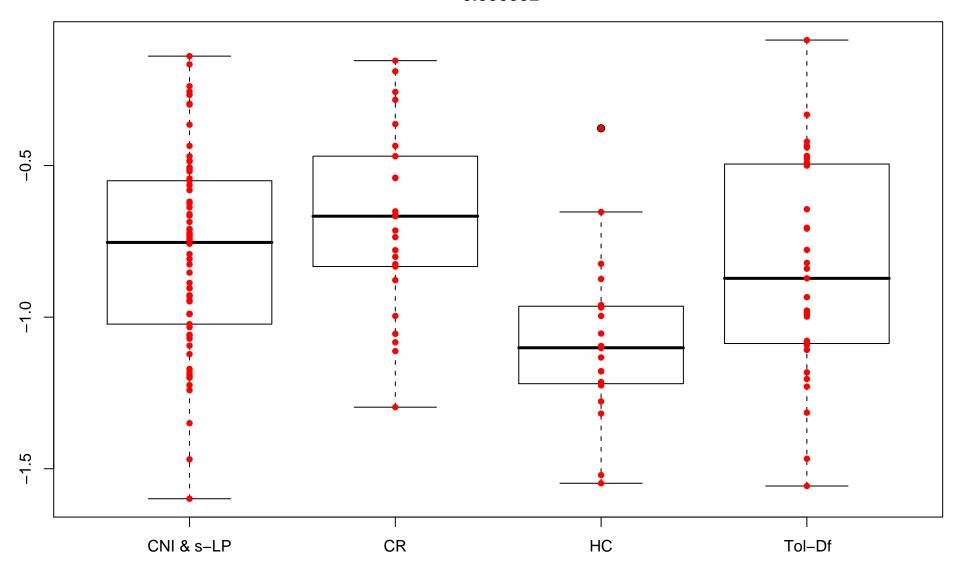
Rank 622 : LOC162632 0.0005396



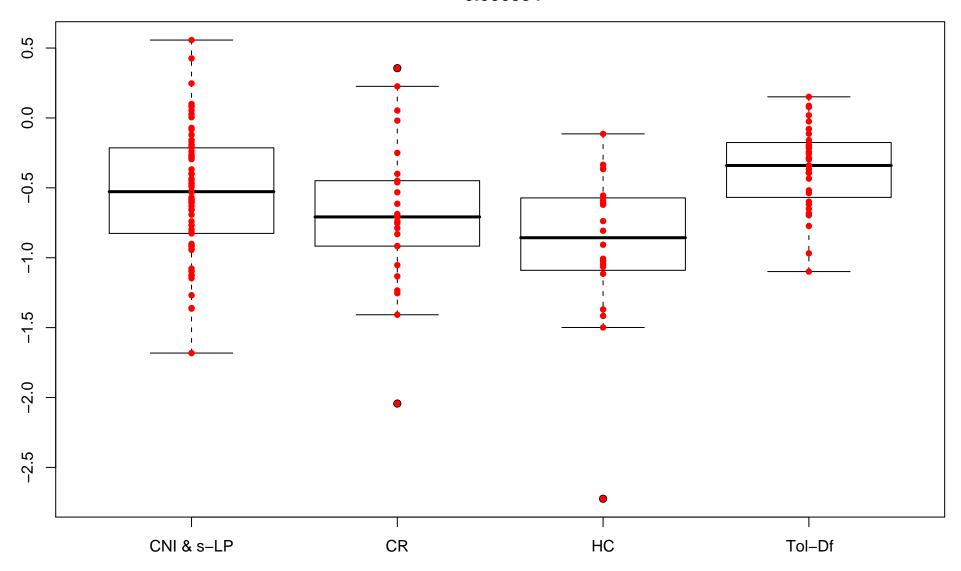
Rank 623 : BASP1 0.0005404



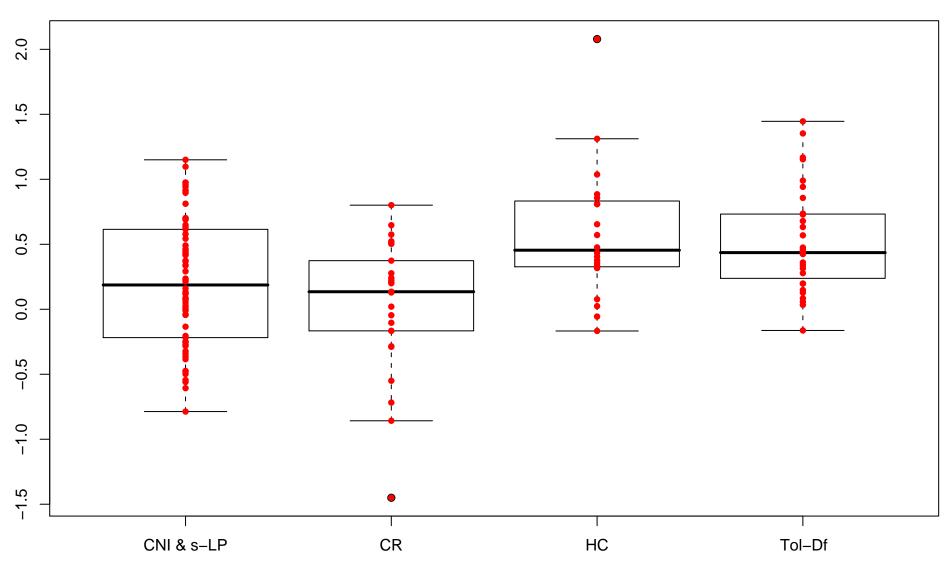
Rank 624 : MIER1 0.000552



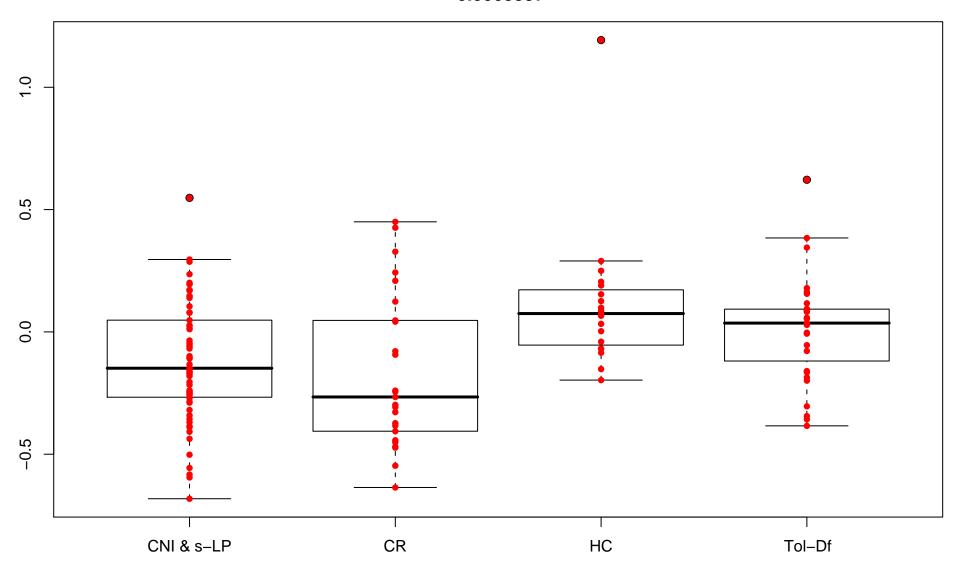
Rank 625 : TAF1B 0.000554



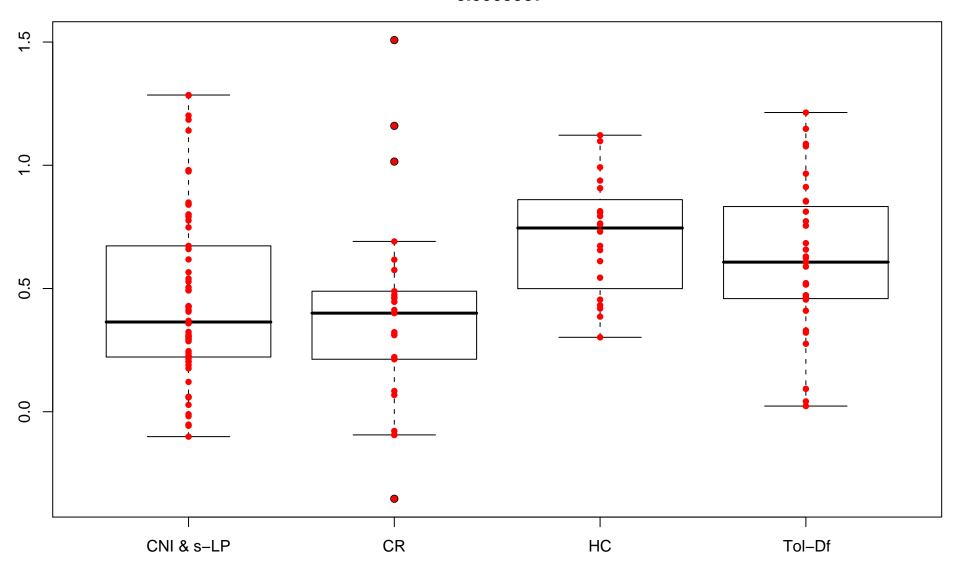
Rank 626 : HSPH1 0.0005551



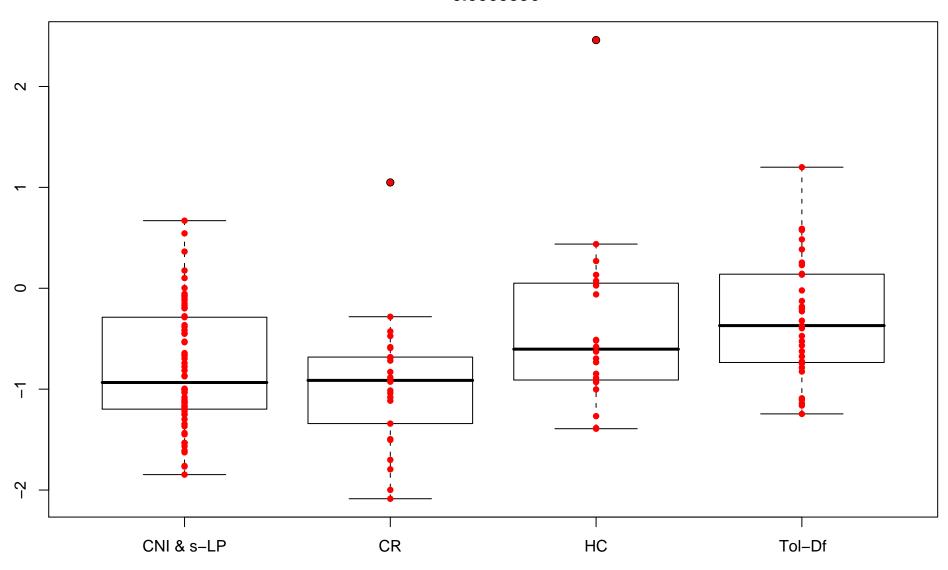
Rank 627 : GCSH 0.0005557



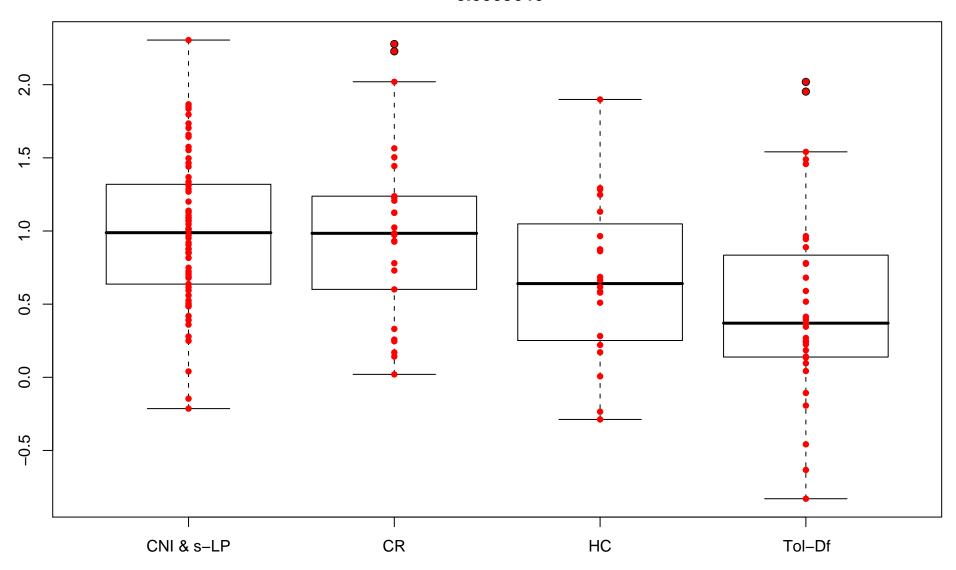
Rank 628 : PTPN11 0.0005587



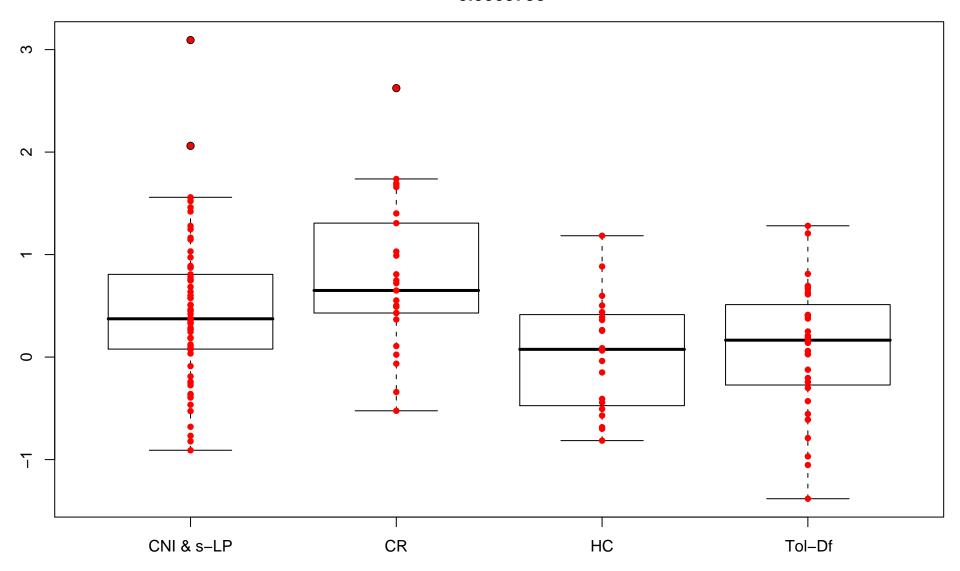
Rank 629 : NOSIP 0.0005596



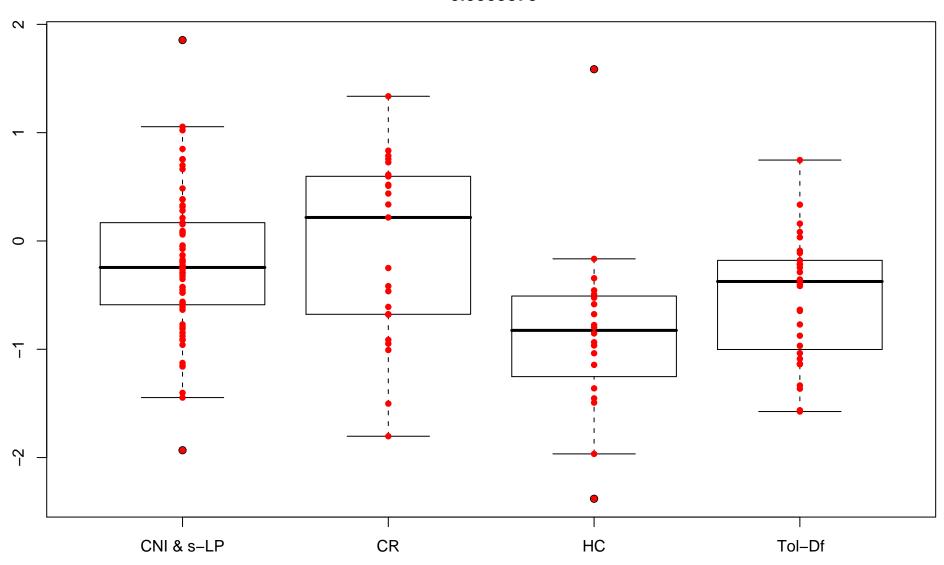
Rank 630 : BCL6 0.0005646



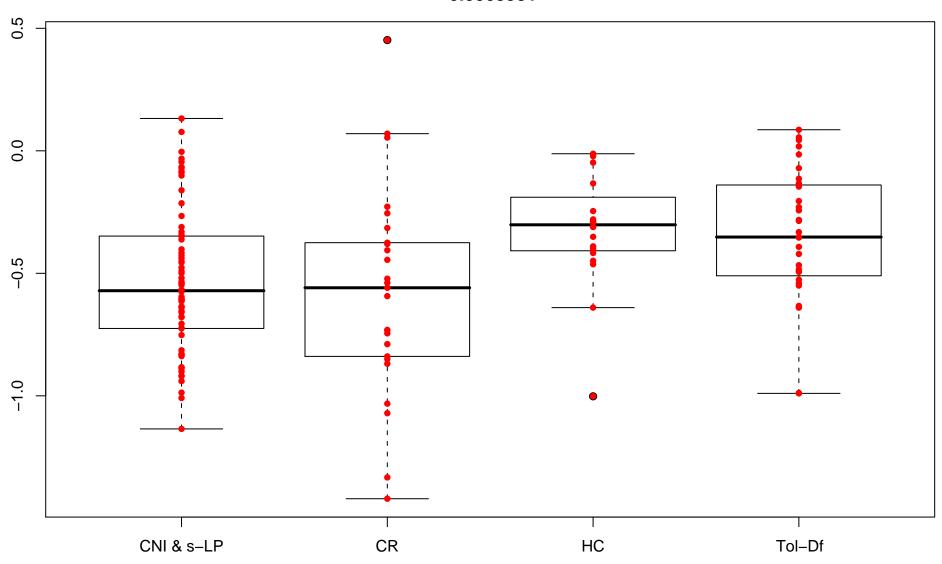
Rank 631 : LOC644538 0.0005793



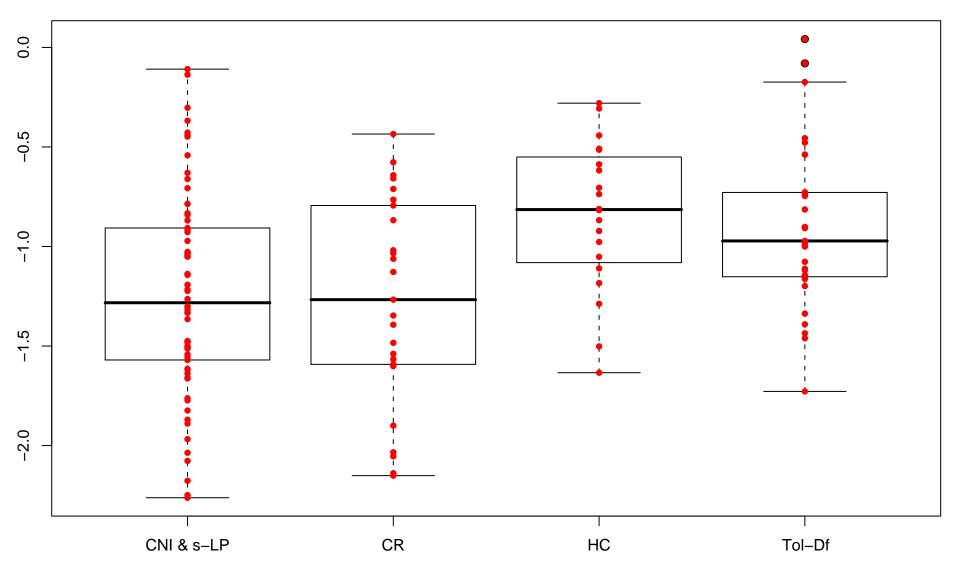
Rank 632 : NEDD9 0.0005875



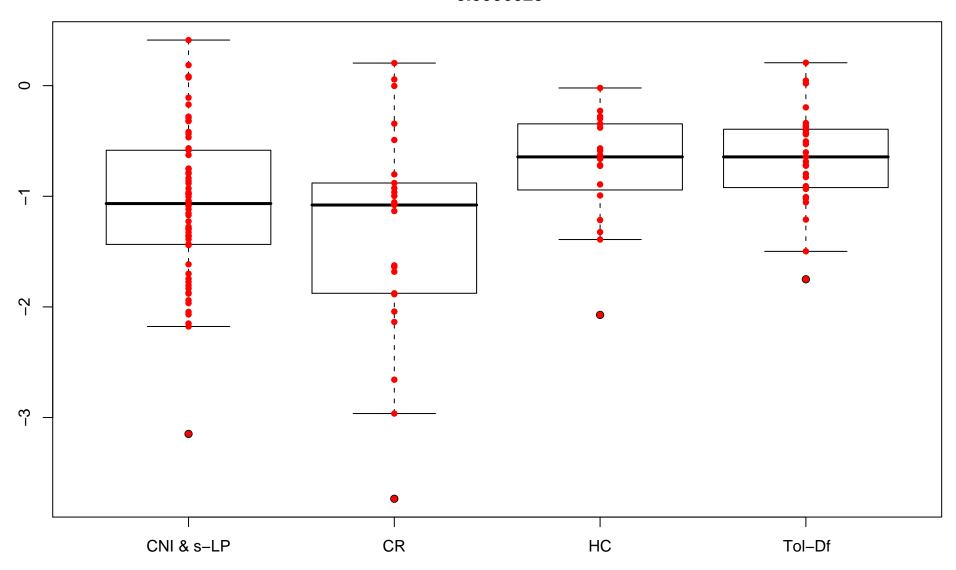
Rank 633 : UCHL5 0.0005981



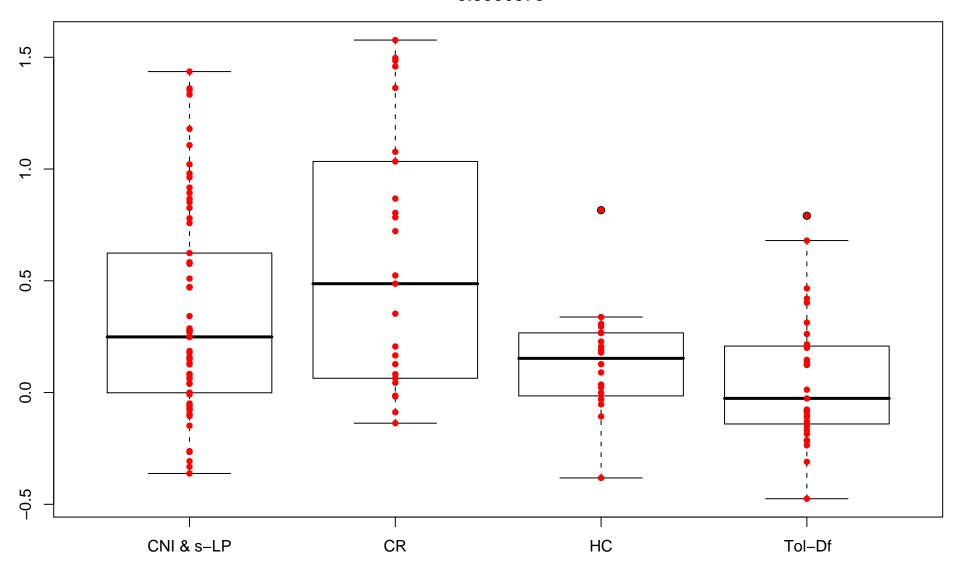
Rank 634: LOC390306 0.0006008



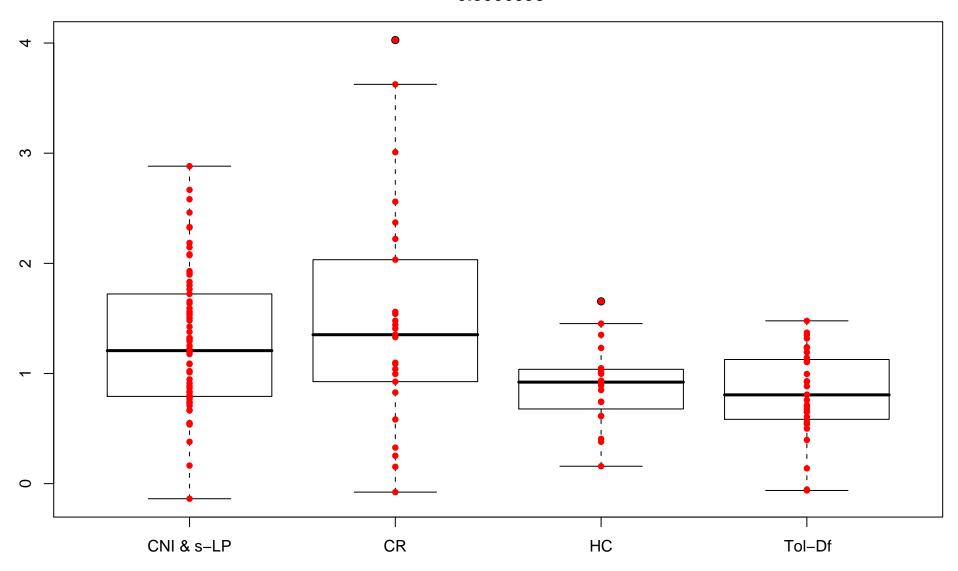
Rank 635 : BCKDHB 0.0006029



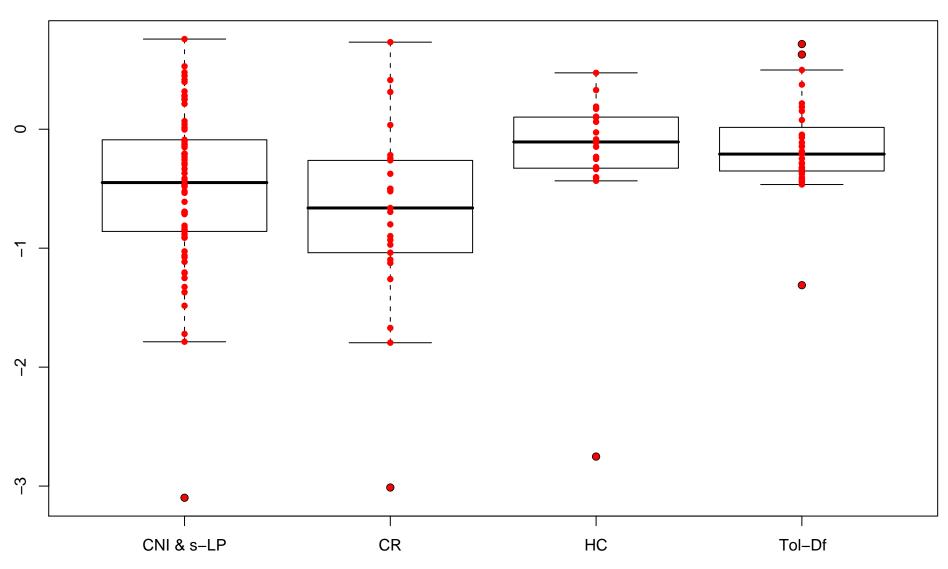
Rank 636 : NUDT16 0.0006073



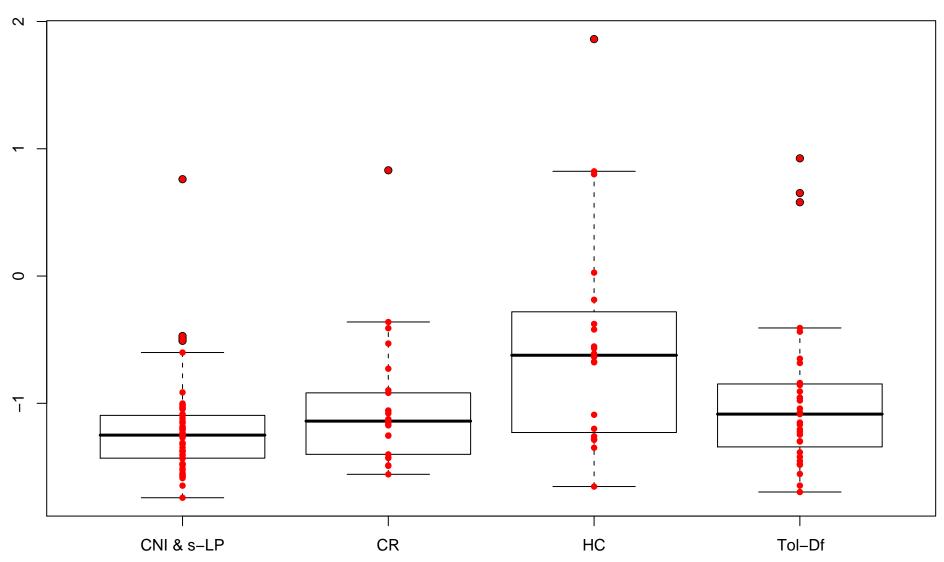
Rank 637 : CD163 0.0006098



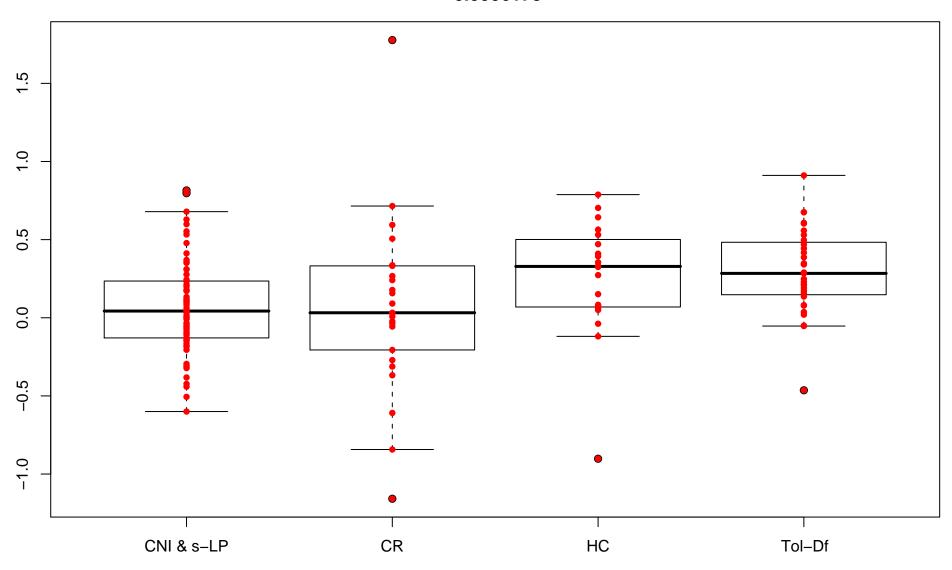
Rank 638 : DNAJC19 0.0006116



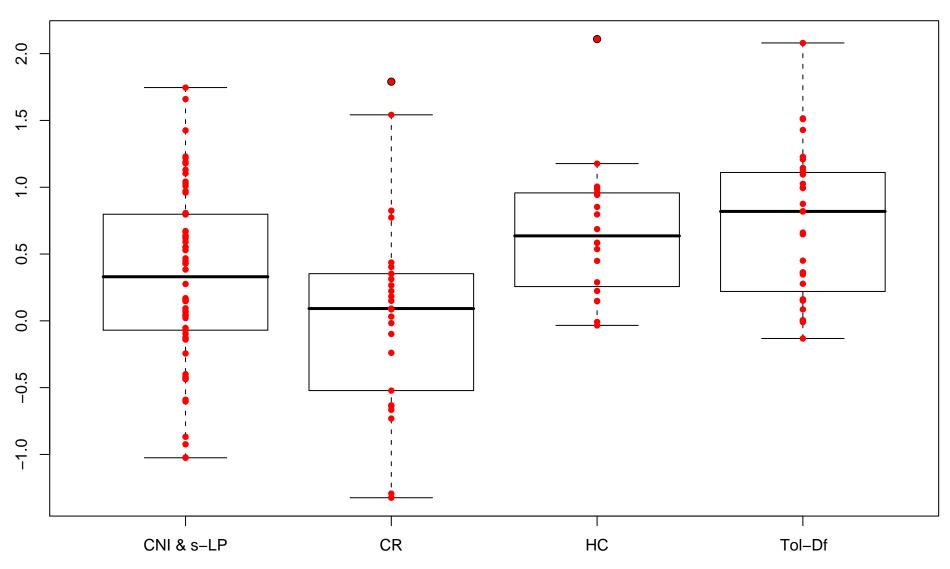
Rank 639 : ADH1A 0.0006152



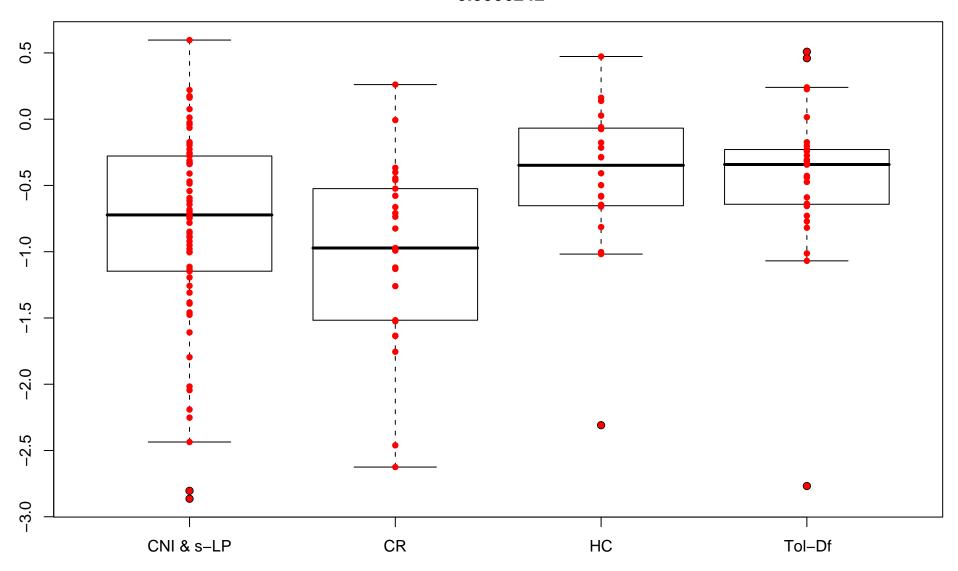
Rank 640 : DNAJC16 0.0006178



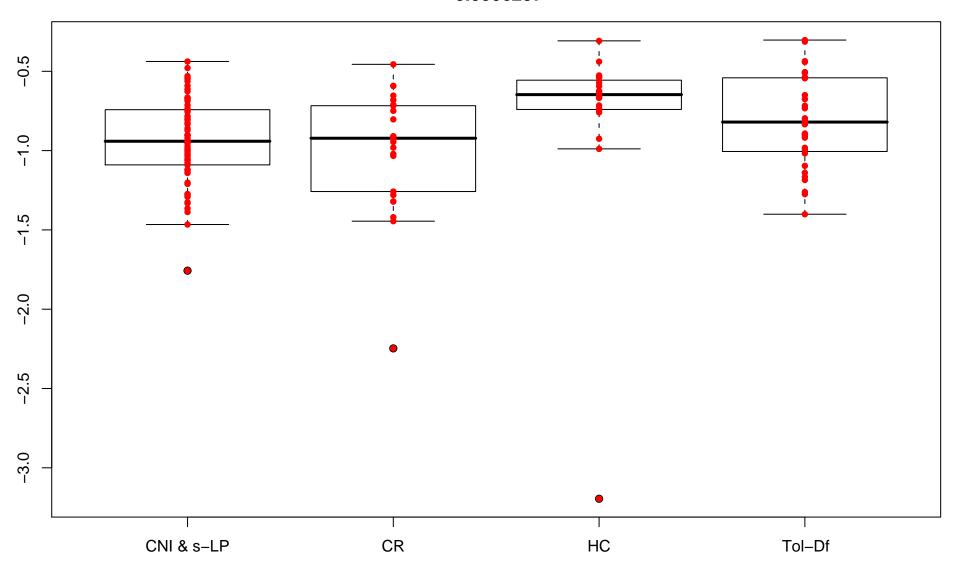
Rank 641 : CXCR3 0.0006218



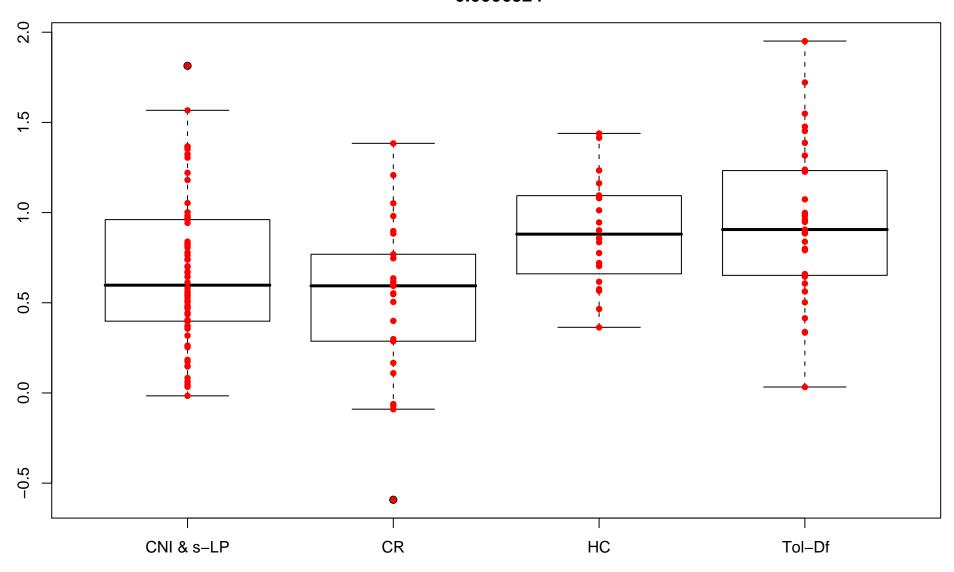
Rank 642 : PIN4 0.0006242



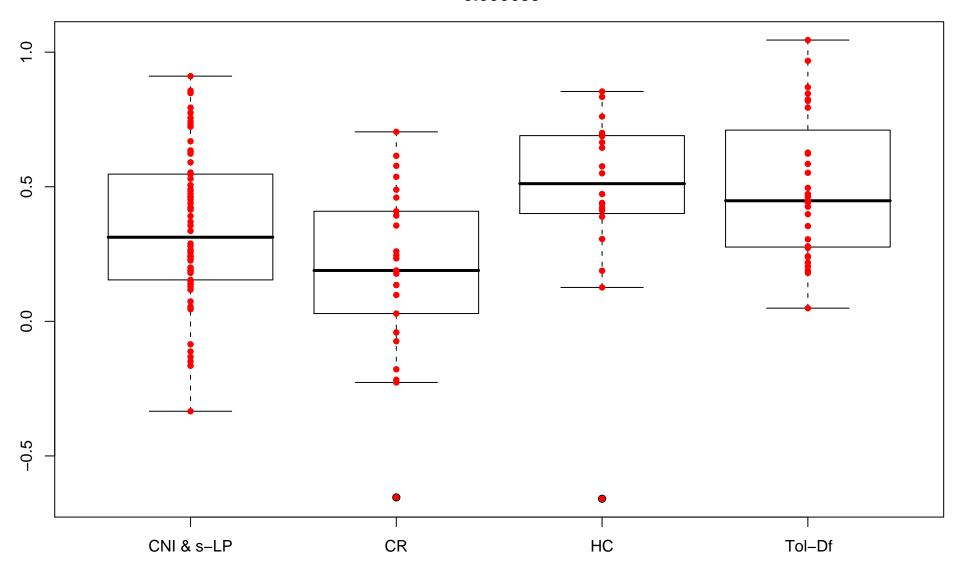
Rank 643 : ATP6V1G1 0.0006287



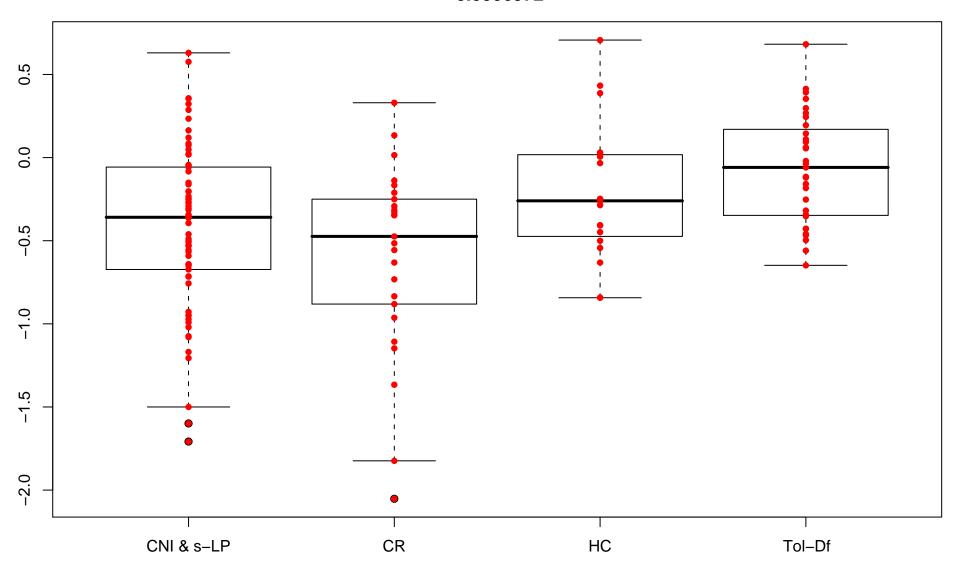
Rank 644 : M-RIP 0.0006324



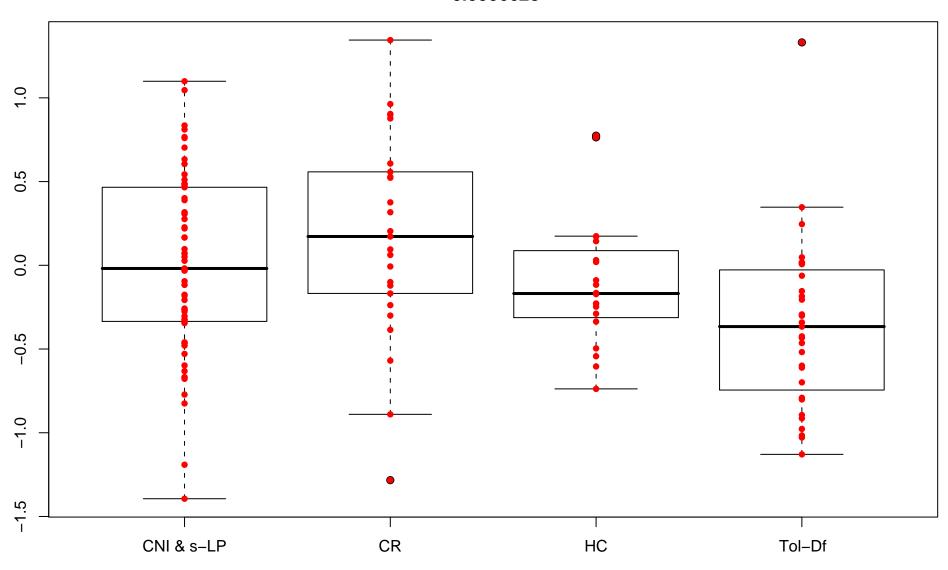
Rank 645 : PRKAB2 0.000633



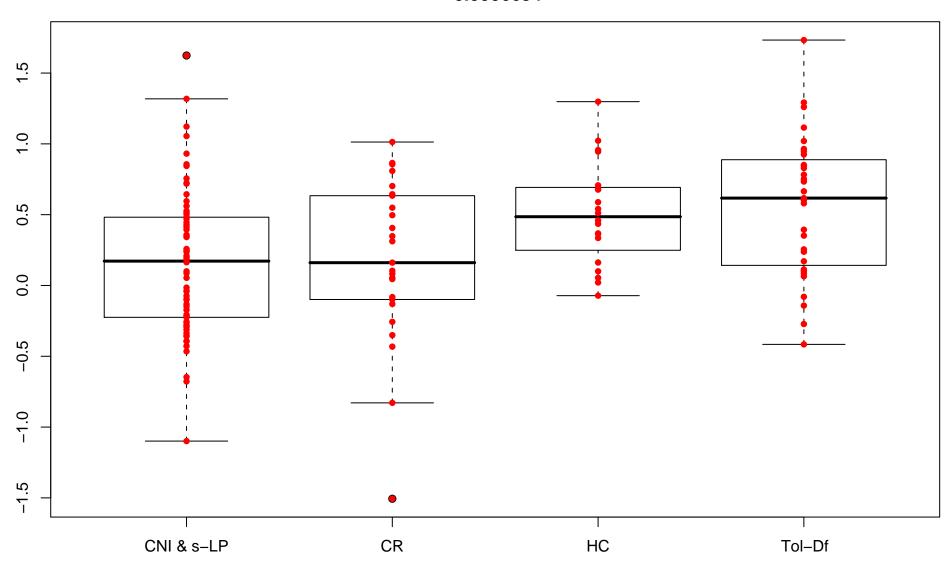
Rank 646 : PPAP2A 0.0006572



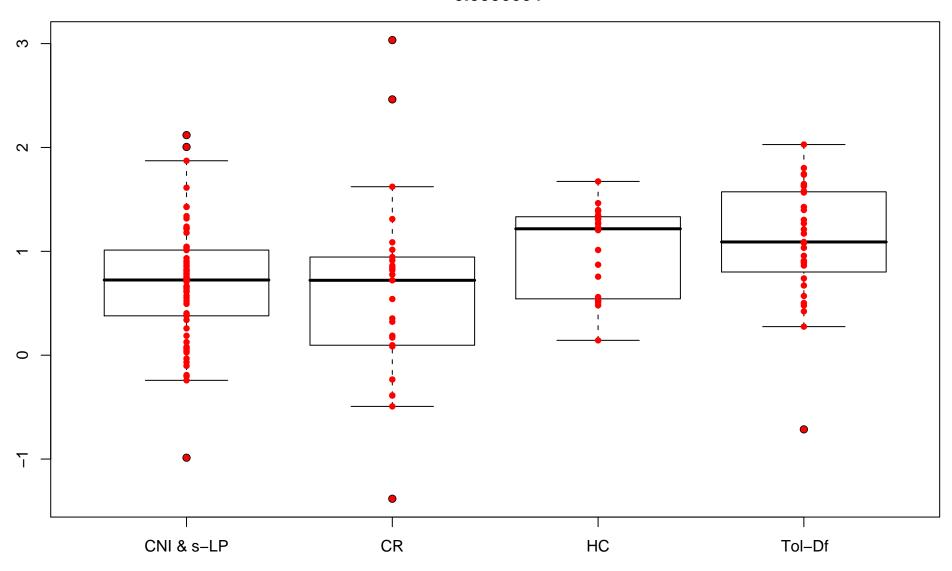
Rank 647 : HRH2 0.0006628



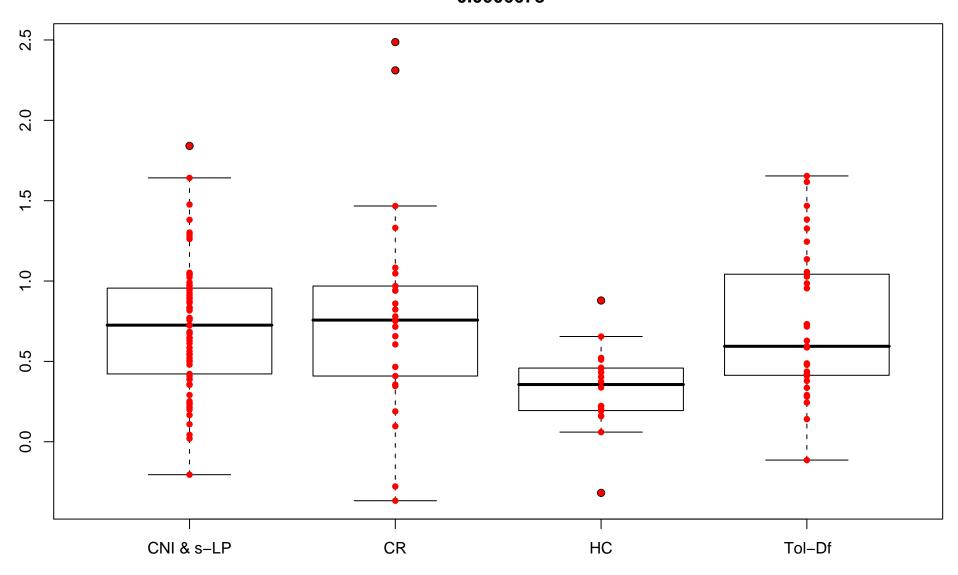
Rank 648 : CRIP3 0.0006634



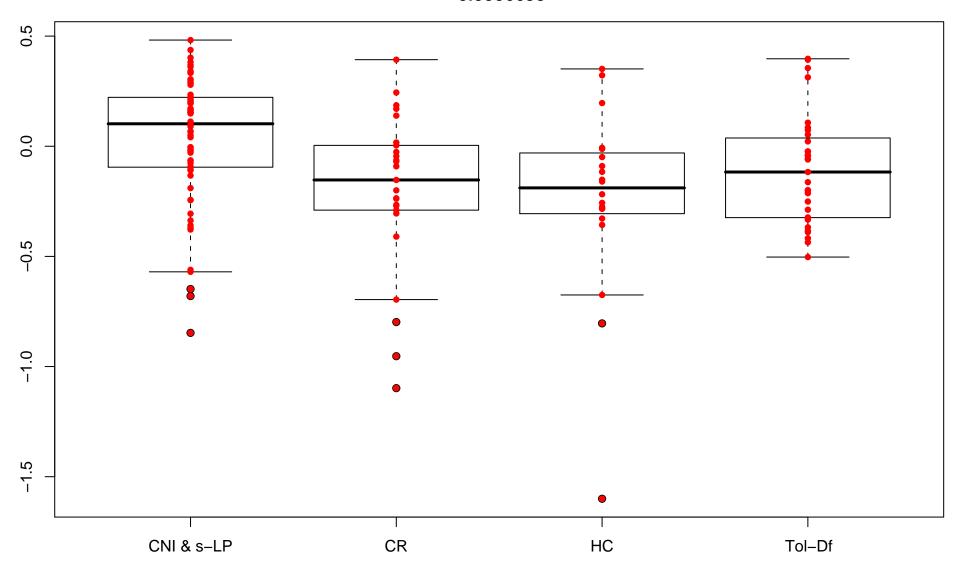
Rank 649 : LOC284262 0.0006664



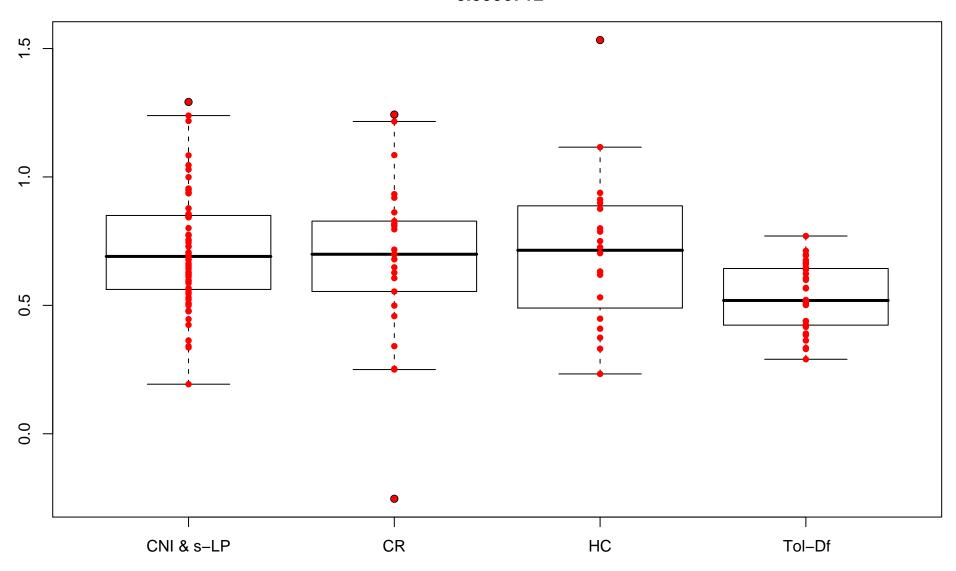
Rank 650: NPIP;LOC339047;LOC642778;LOC642799 0.0006678



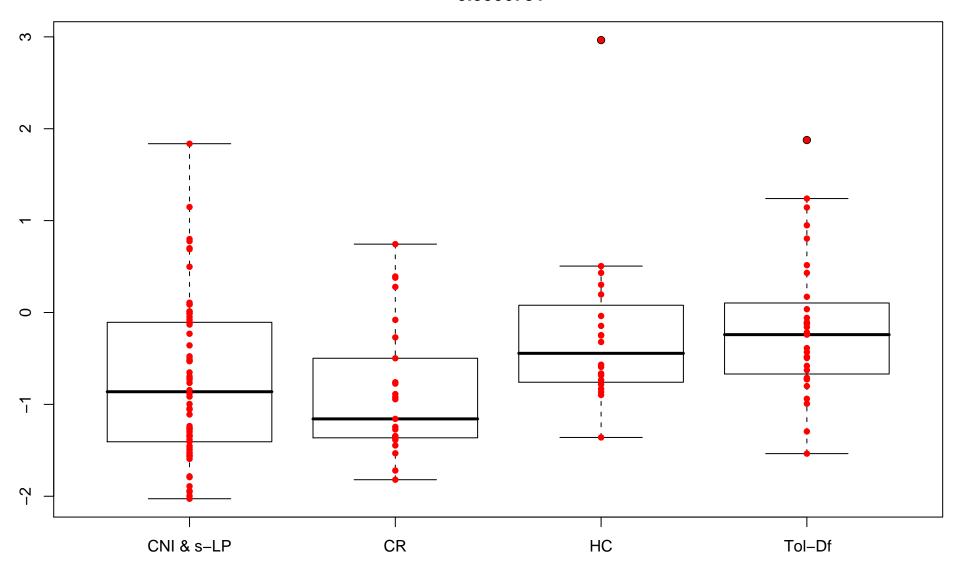
Rank 651 : TGFBR1 0.0006695



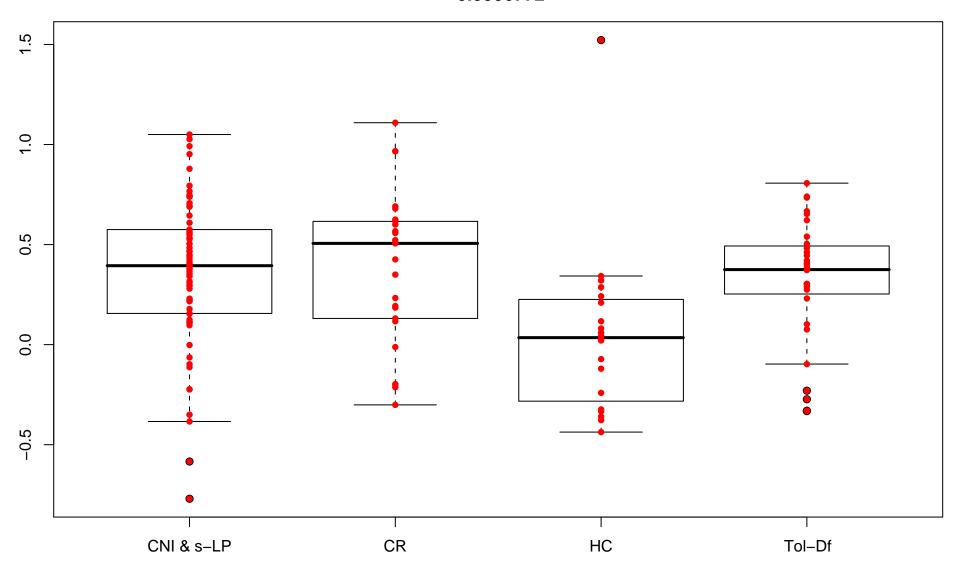
Rank 652 : TGFB1 0.0006712



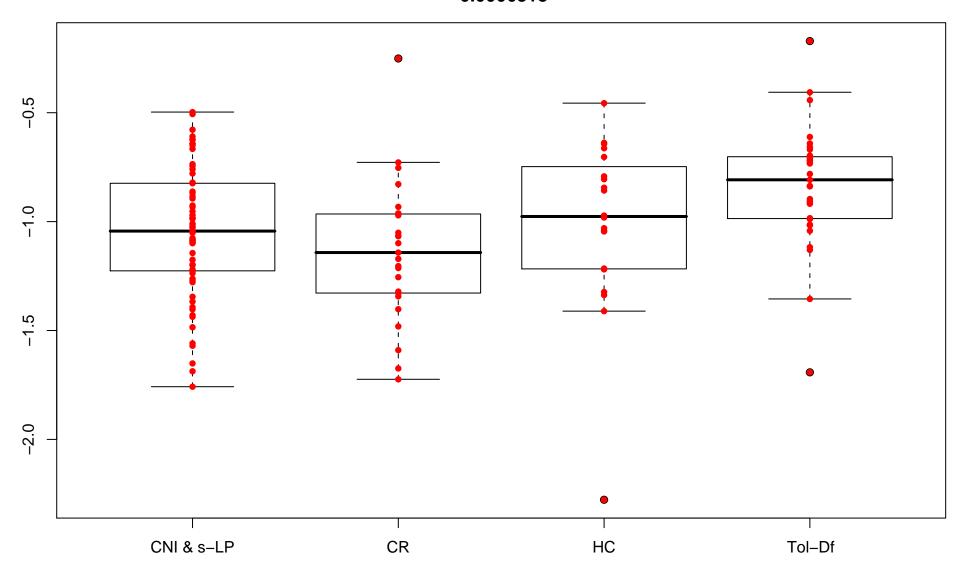
Rank 653 : HPCAL4 0.0006751



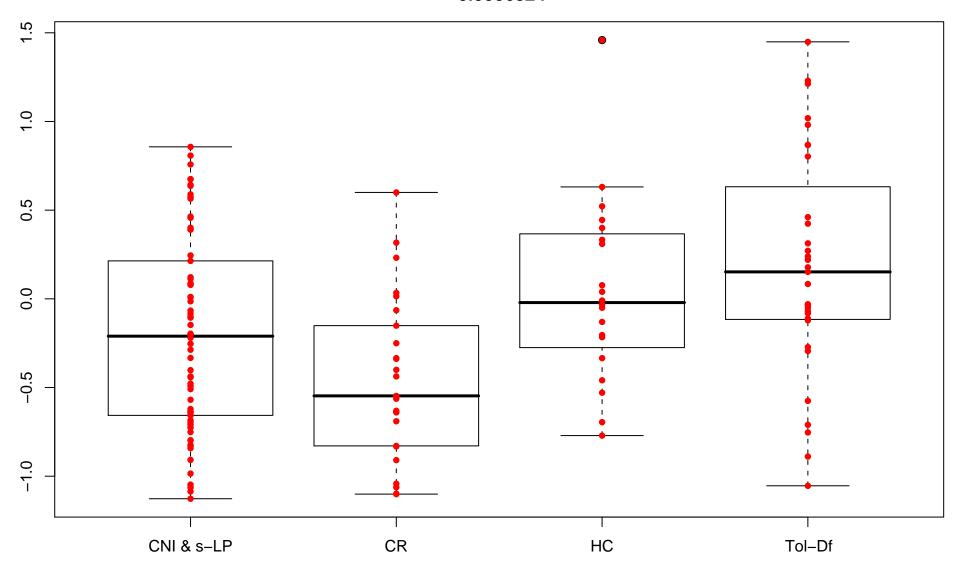
Rank 654 : LIMK1 0.0006772



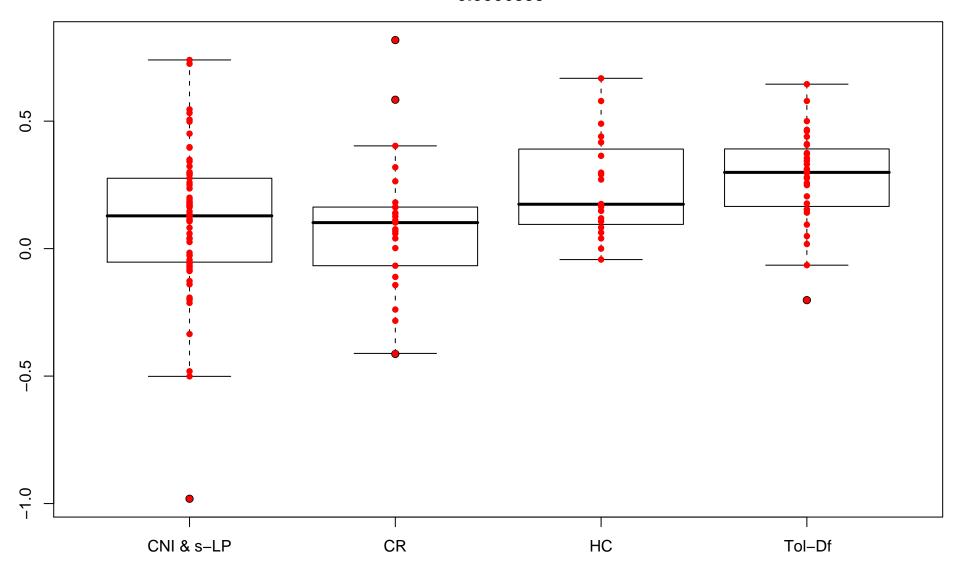
Rank 655 : NDUFA4 0.0006818



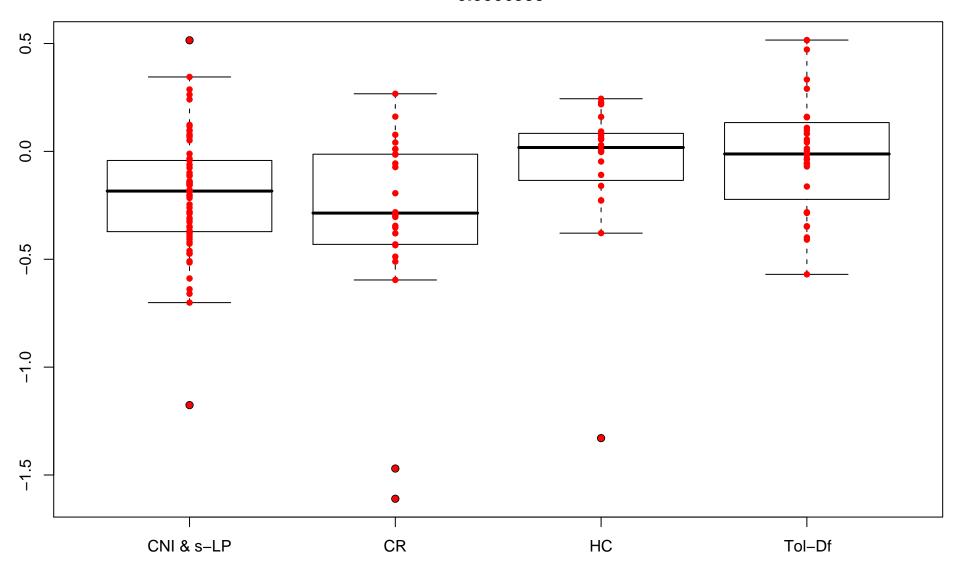
Rank 656 : IL24 0.0006824



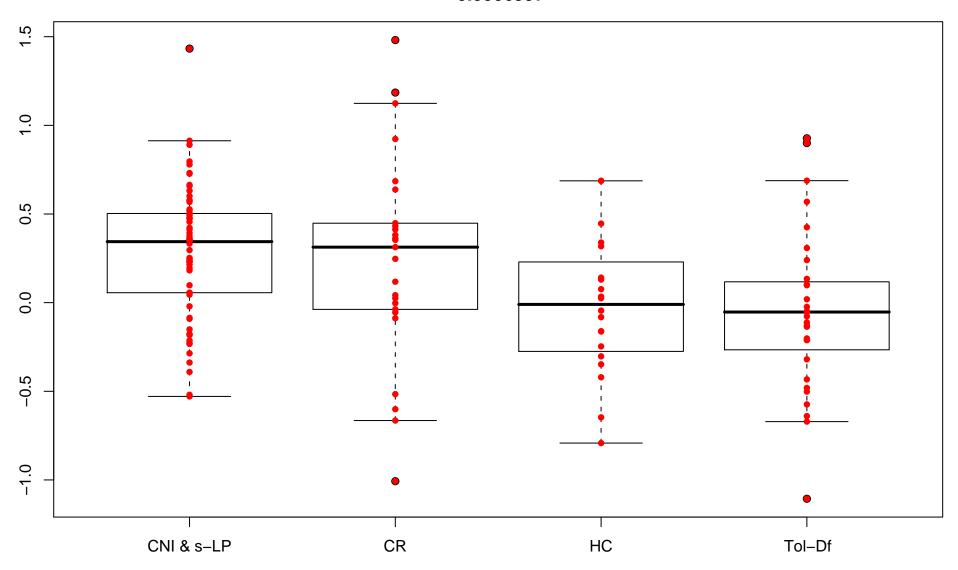
Rank 657 : EIF1 0.0006839



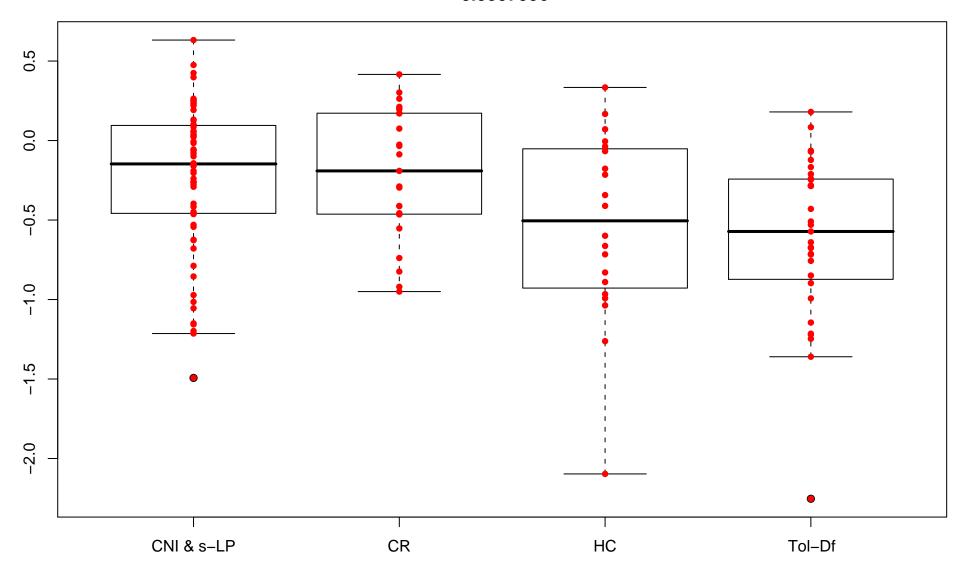
Rank 658 : AW270158 0.0006939



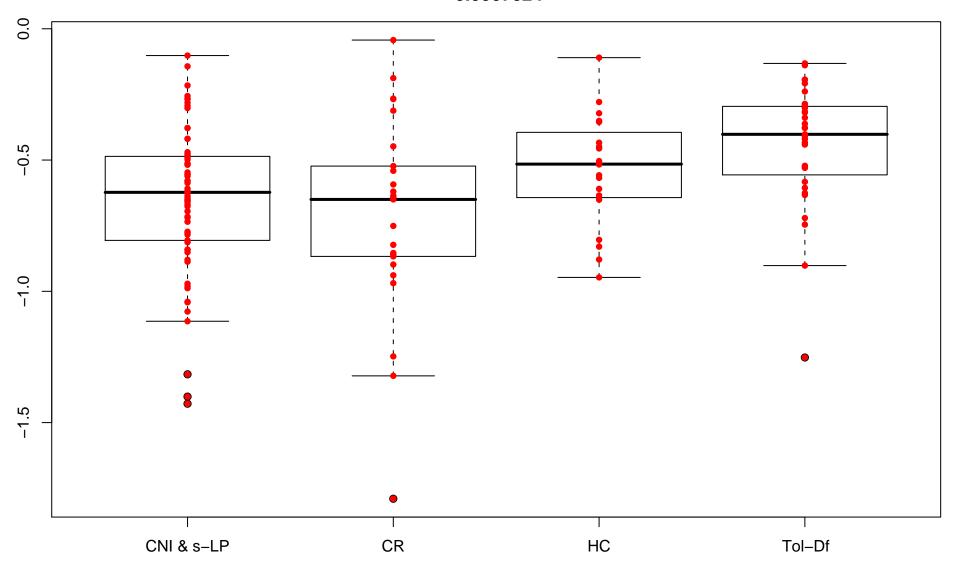
Rank 659 : TSHZ3 0.0006997



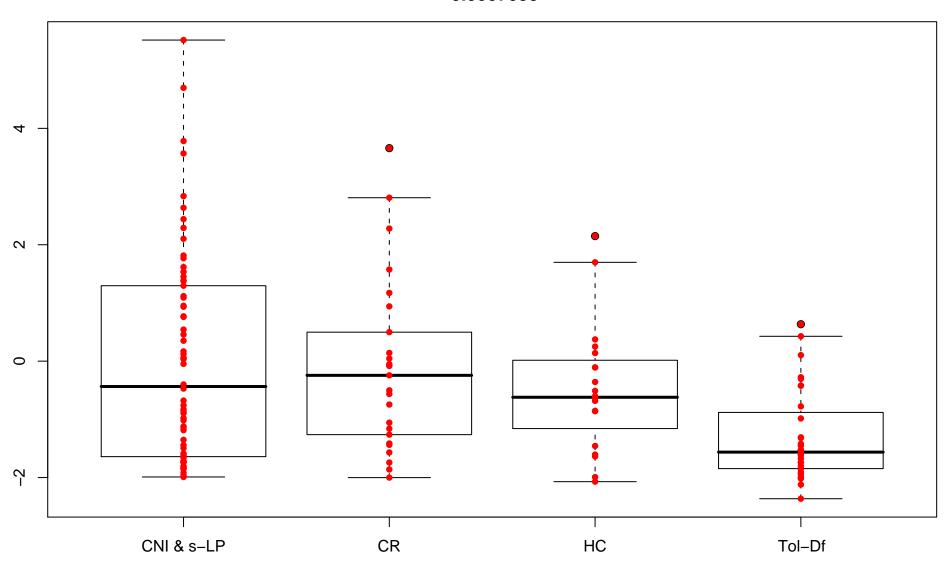
Rank 660 : FCGR2A;FCGR2C 0.0007006



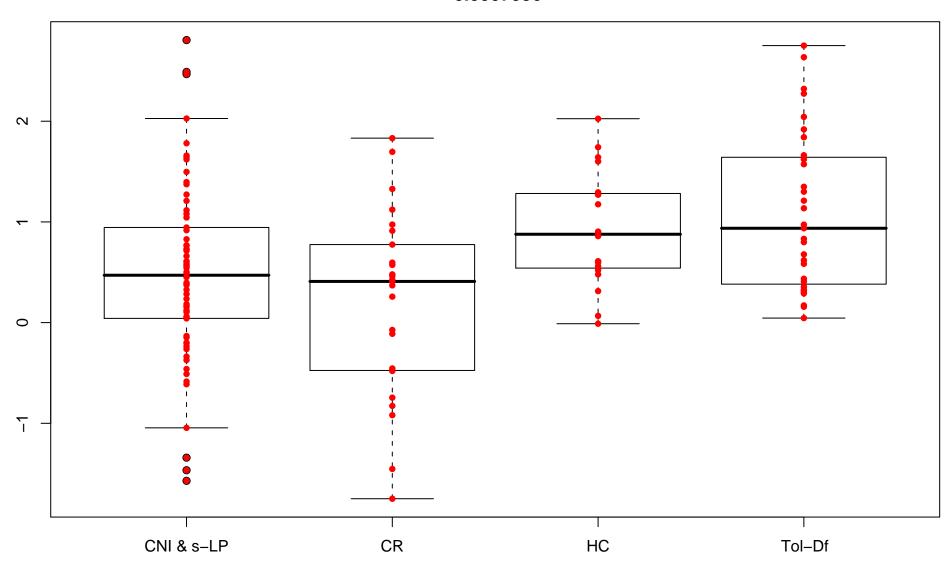
Rank 661 : BC028022 0.0007024



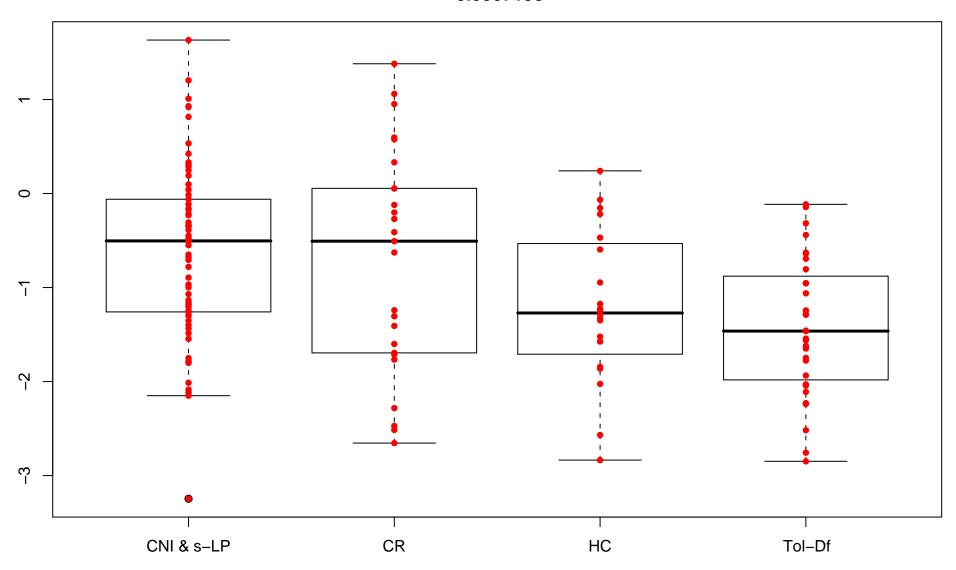
Rank 662 : MMP8 0.0007035



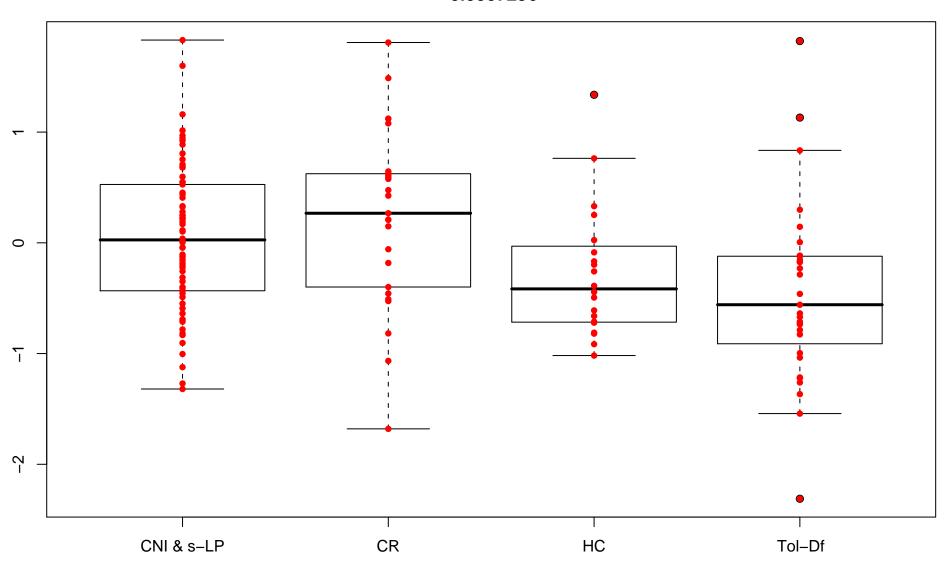
Rank 663 : AQP3 0.0007086



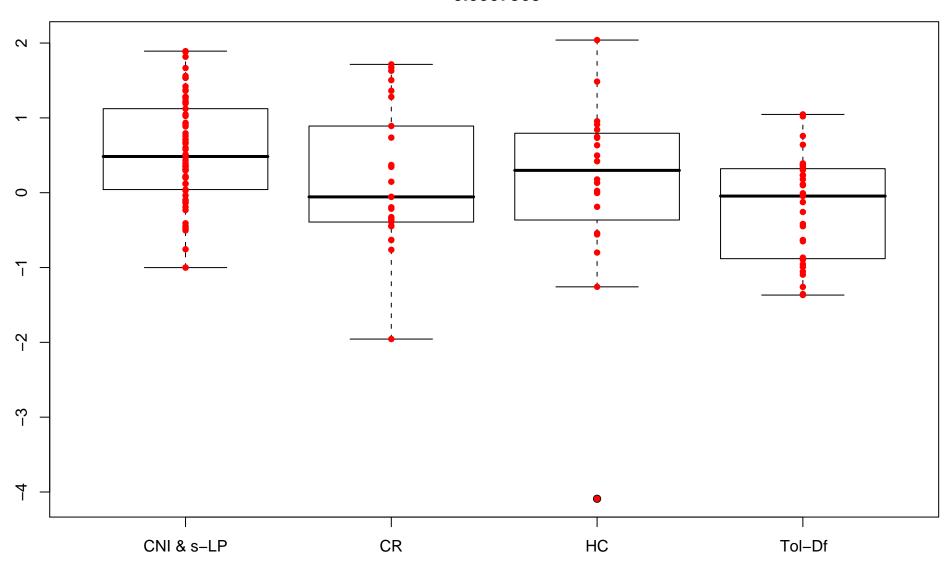
Rank 664 : PLEK2 0.0007138



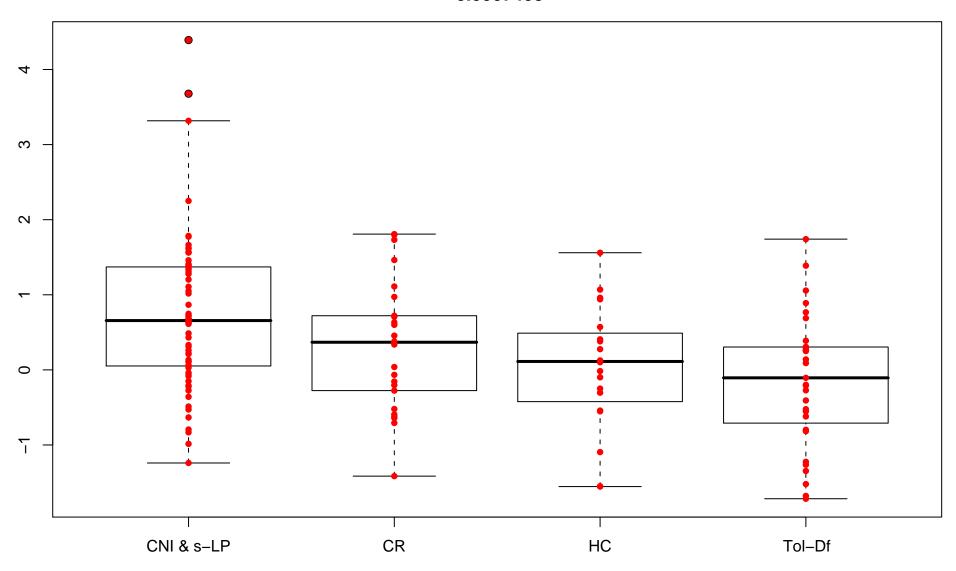
Rank 665 : LOC644186 0.0007296



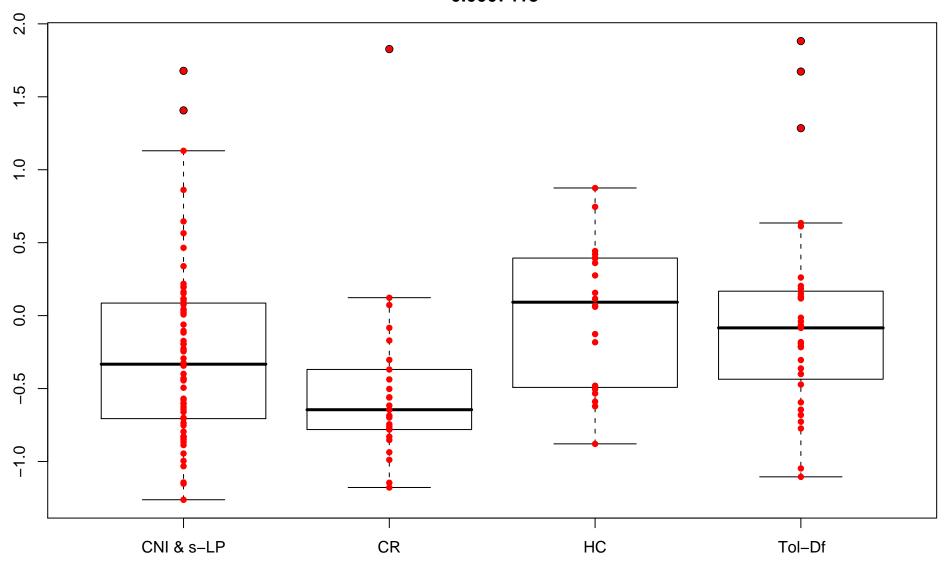
Rank 666 : MANSC1 0.0007368



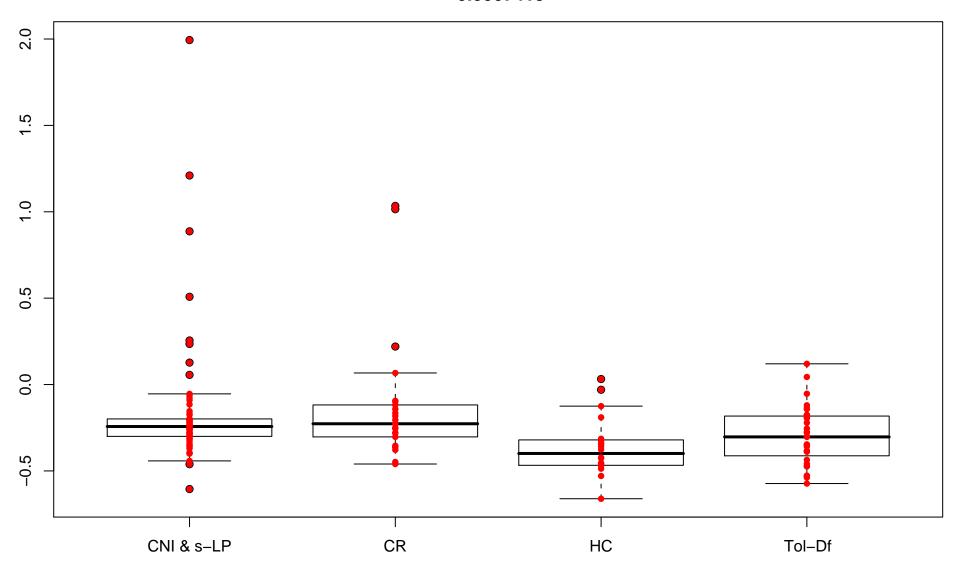
Rank 667: MMP9 0.0007403



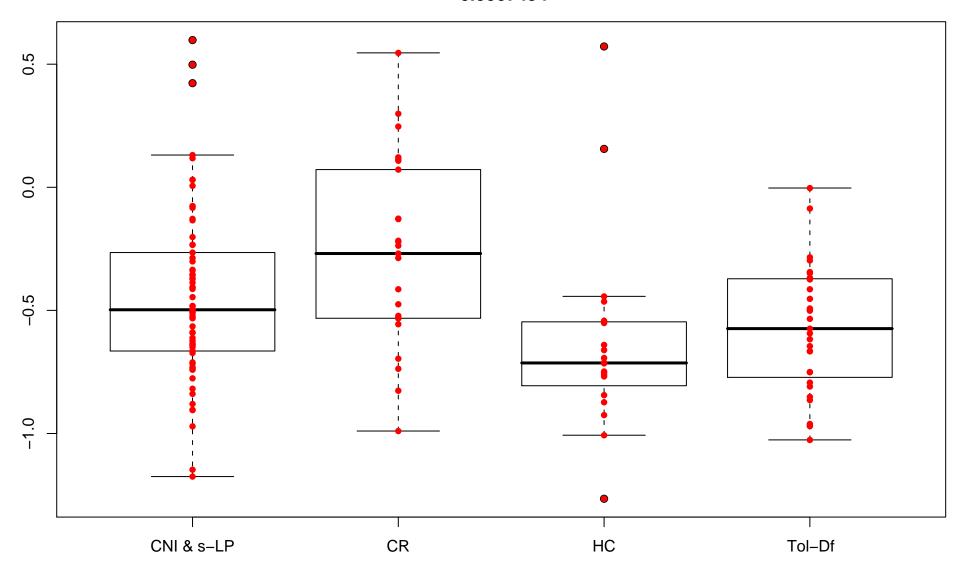
Rank 668 : SLC10A4 0.0007413



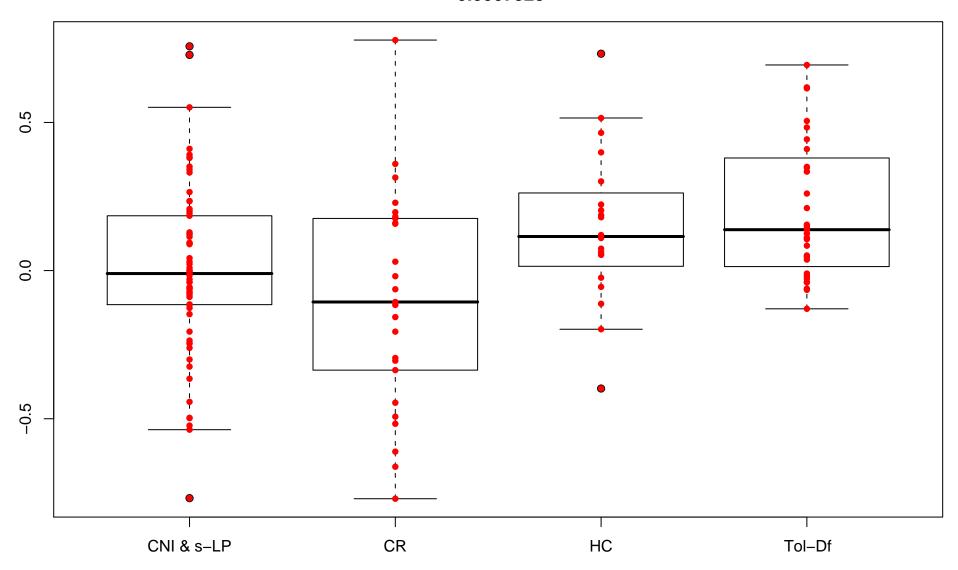
Rank 669 : KIF14 0.0007415



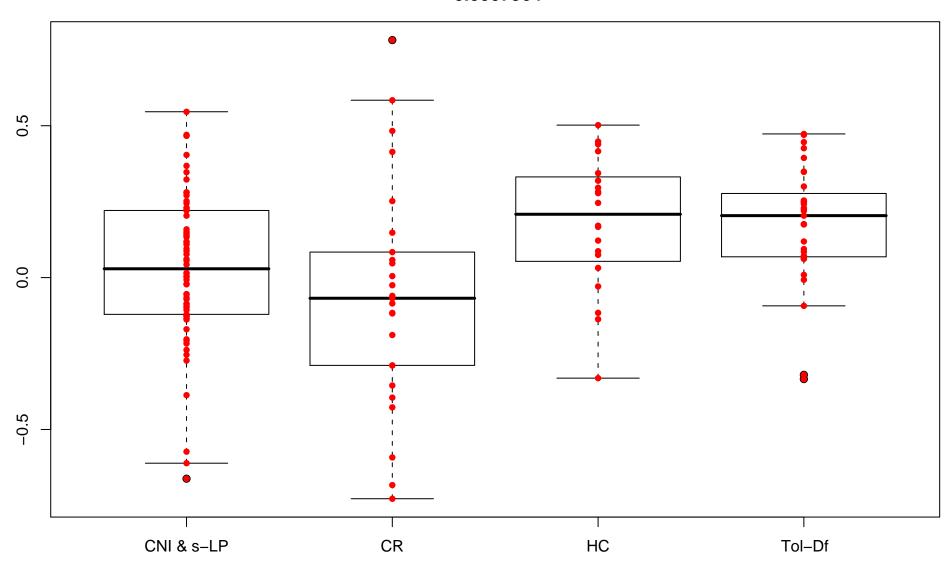
Rank 670 : ORAI3 0.0007494



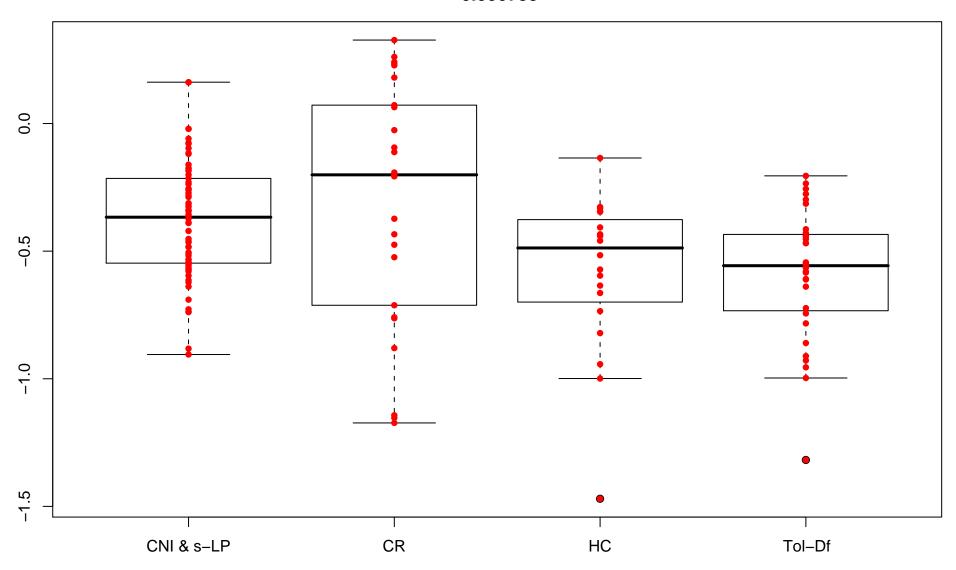
Rank 671 : PSMD7 0.0007525



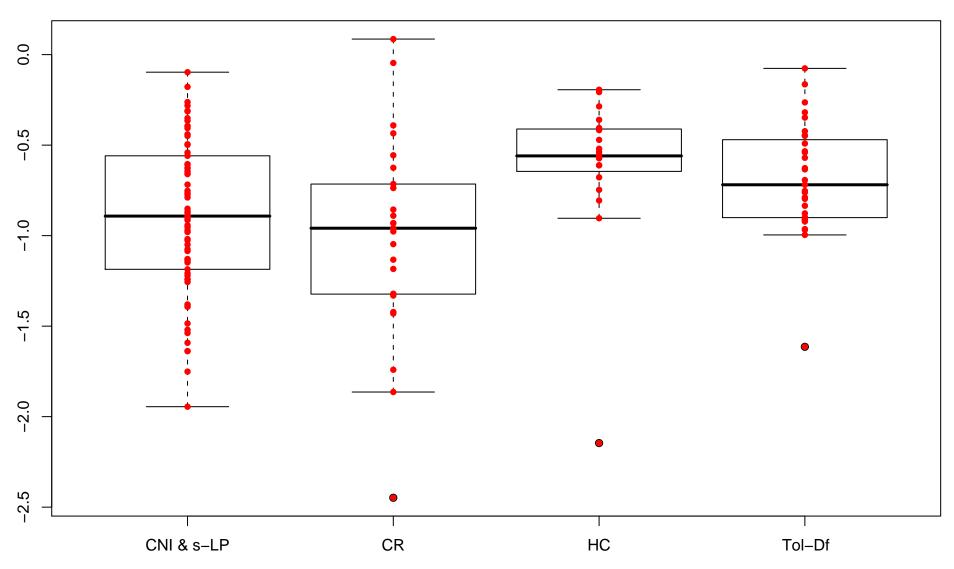
Rank 672 : ZNF227;ZNF235 0.0007564



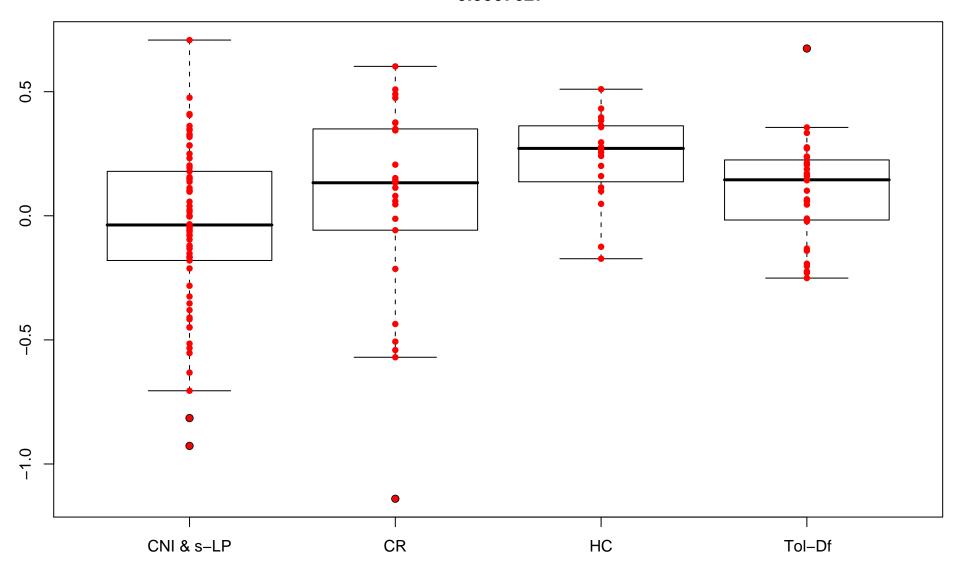
Rank 673 : REEP3 0.000759



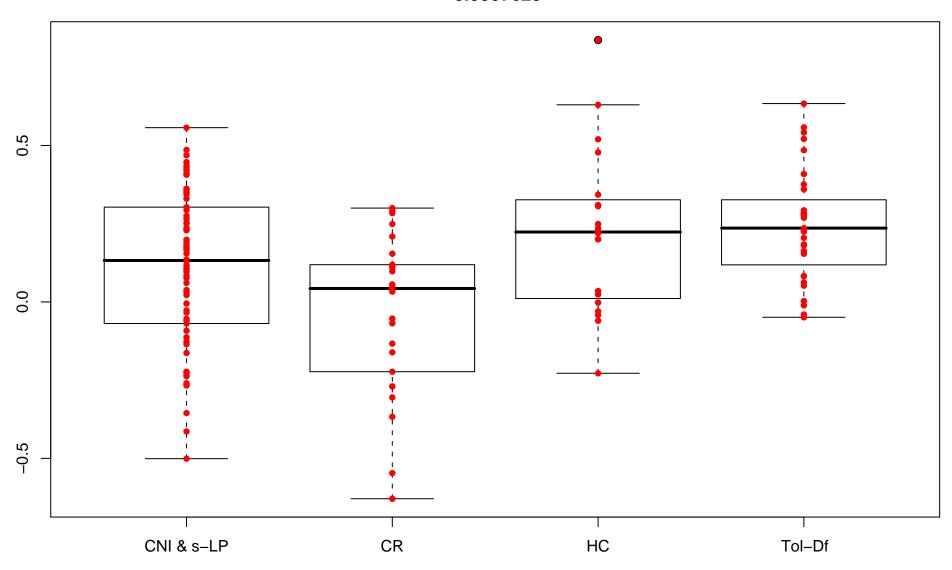
Rank 674 : PDCD2 0.000761



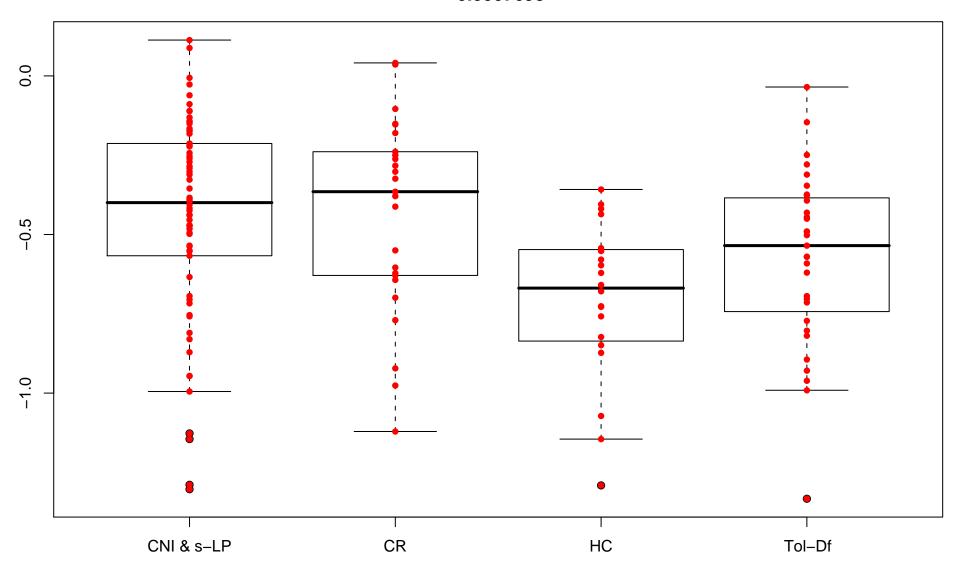
Rank 675 : RPAP3 0.0007627



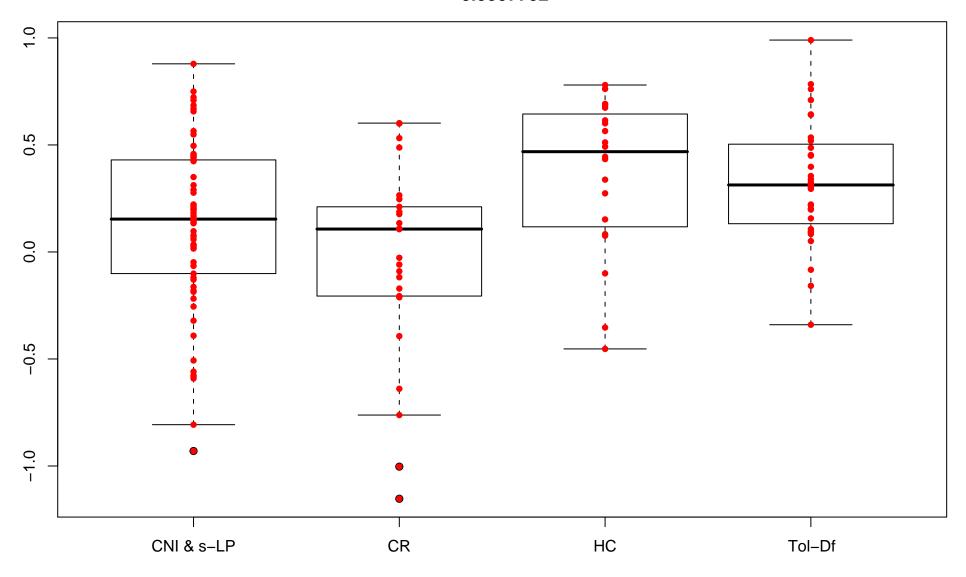
Rank 676 : LOC643641;SSPO 0.0007629



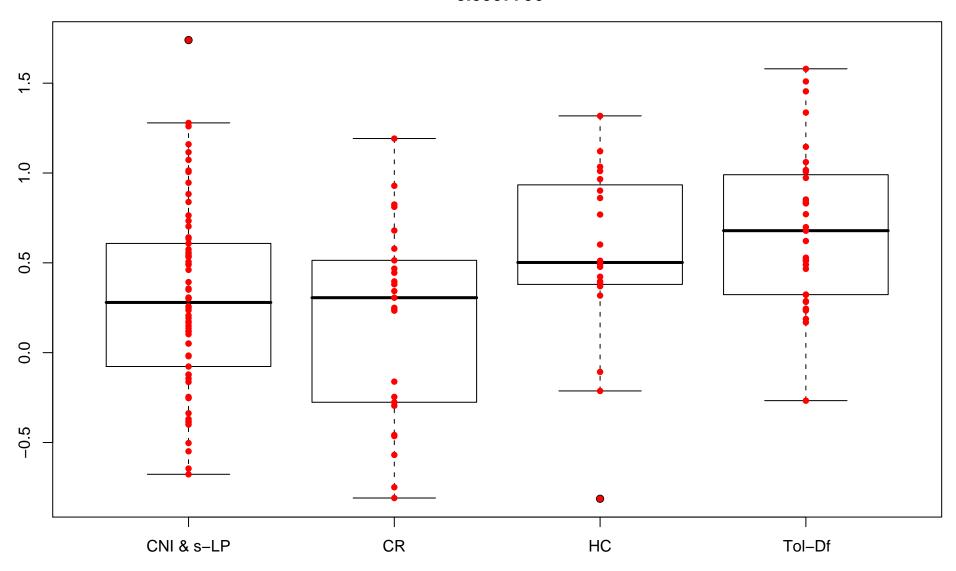
Rank 677 : CHMP1A 0.0007698



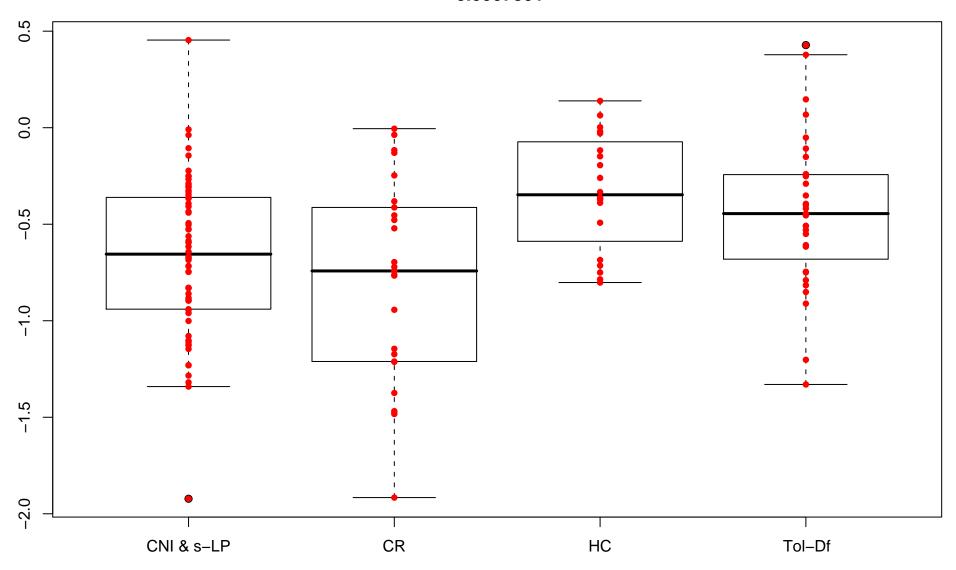
Rank 678 : RBL2 0.0007702



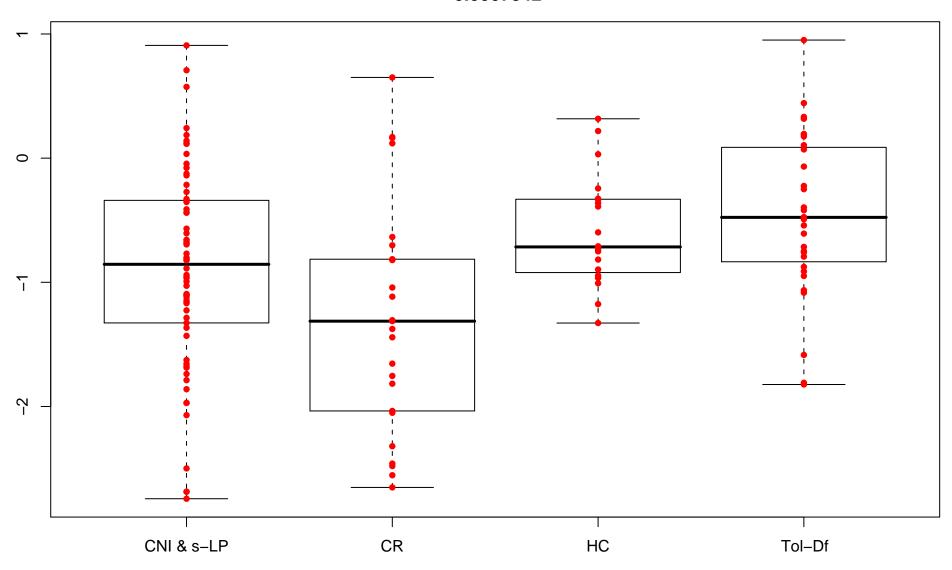
Rank 679 : EPRS 0.0007706



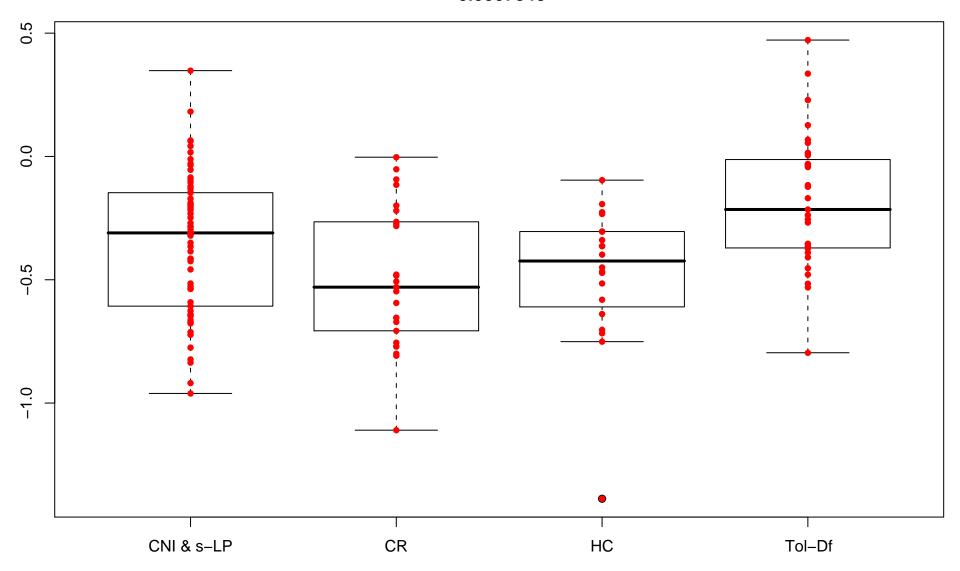
Rank 680 : TNFRSF25 0.0007801



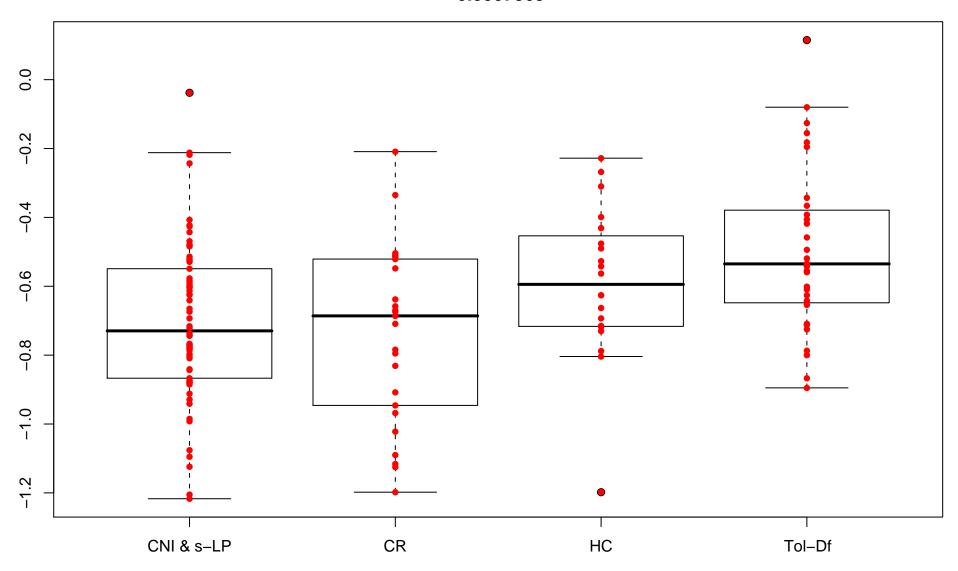
Rank 681 : LY9 0.0007842



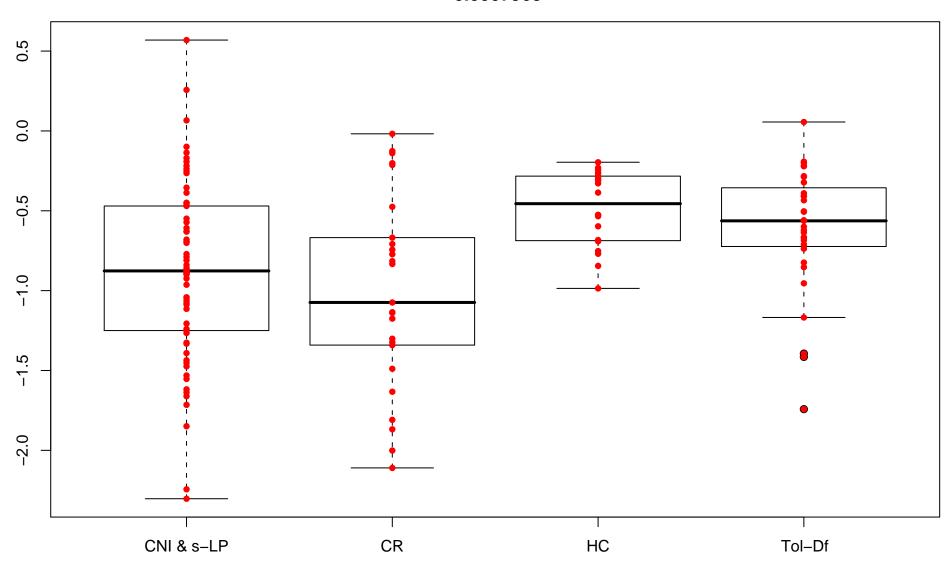
Rank 682 : BCS1L 0.0007848



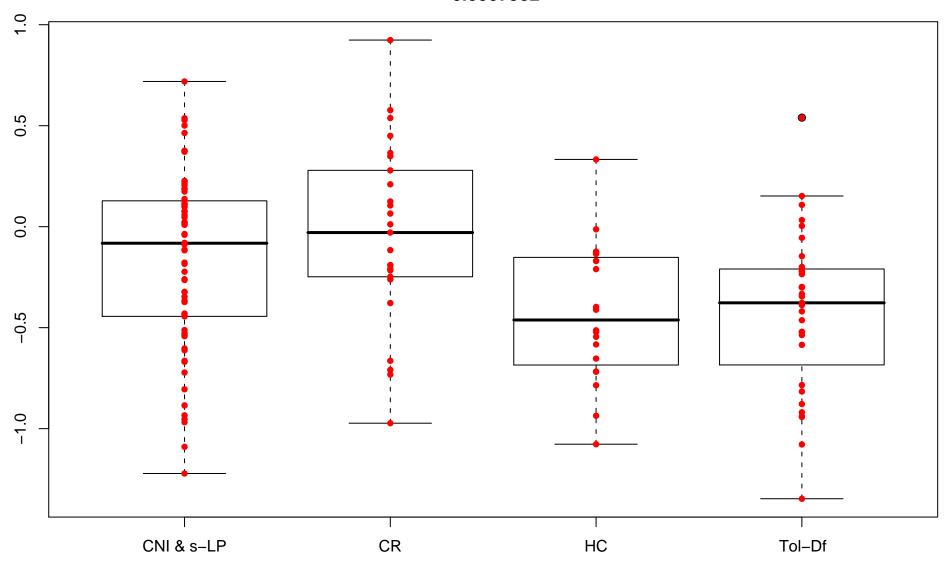
Rank 683 : IGBP1 0.0007865



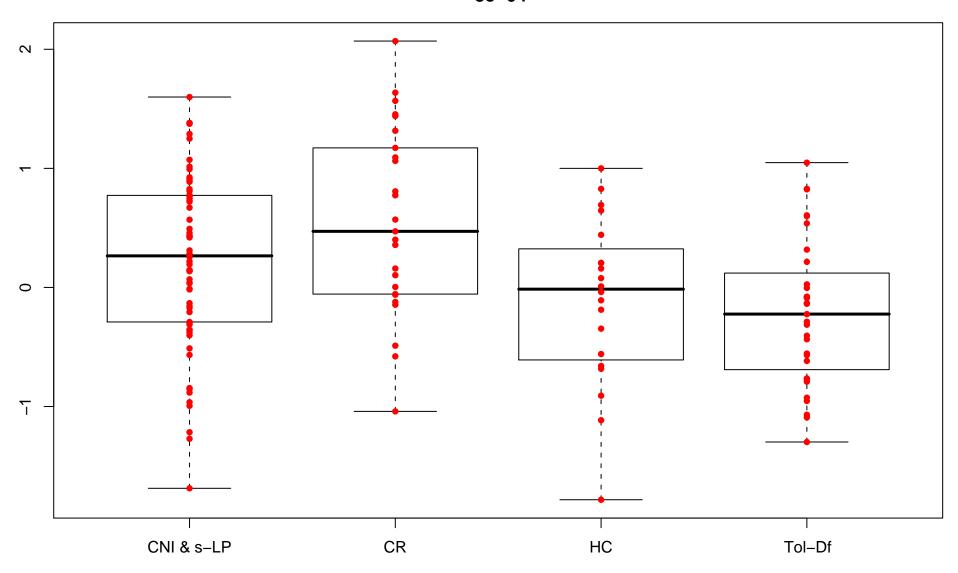
Rank 684 : RBM3 0.0007968



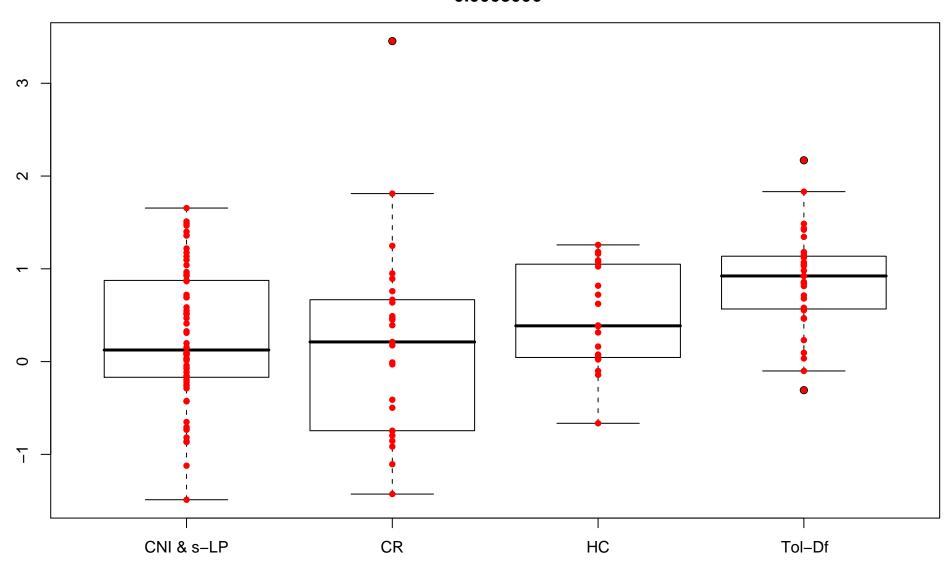
Rank 685 : CFLAR 0.0007982



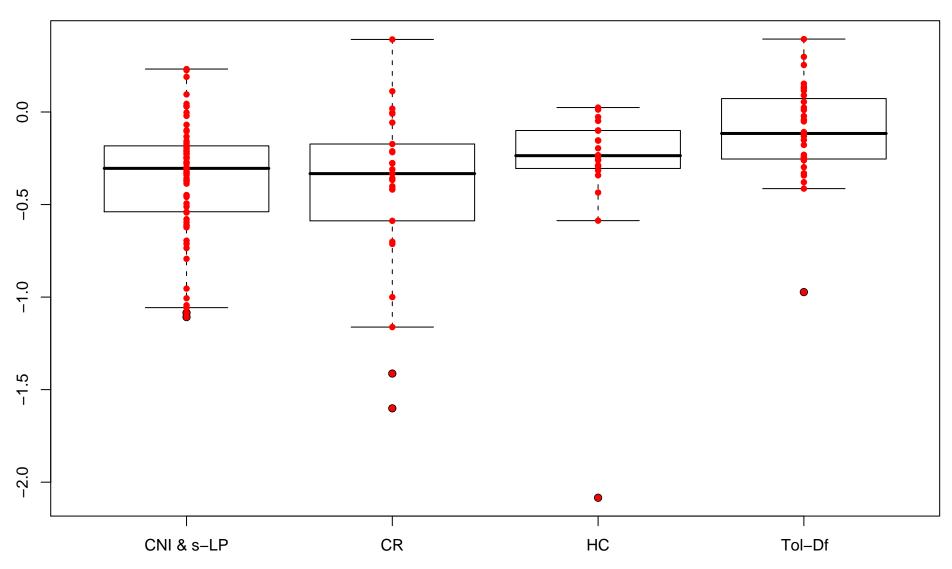
Rank 686 : ABCC4 8e-04



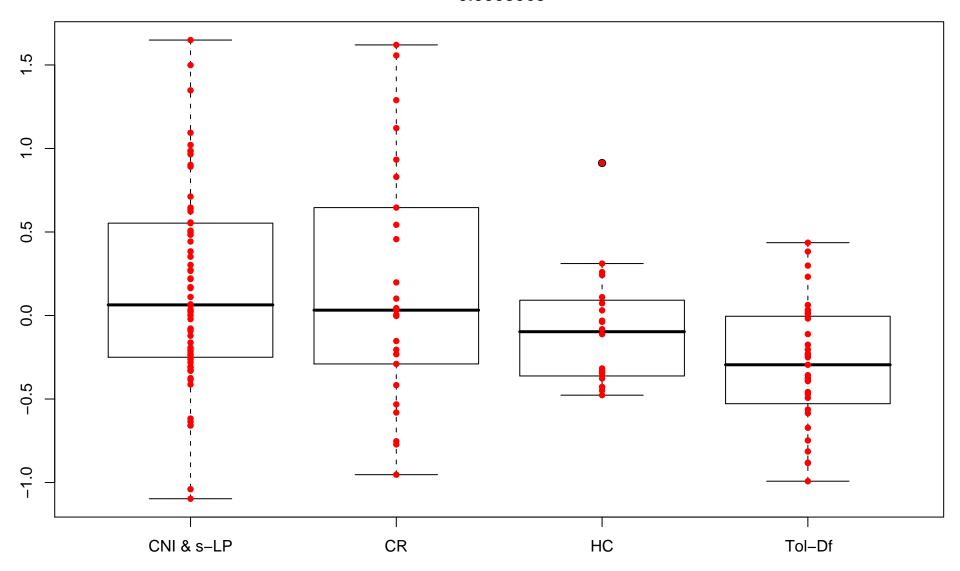
Rank 687 : ZRANB3 0.0008006



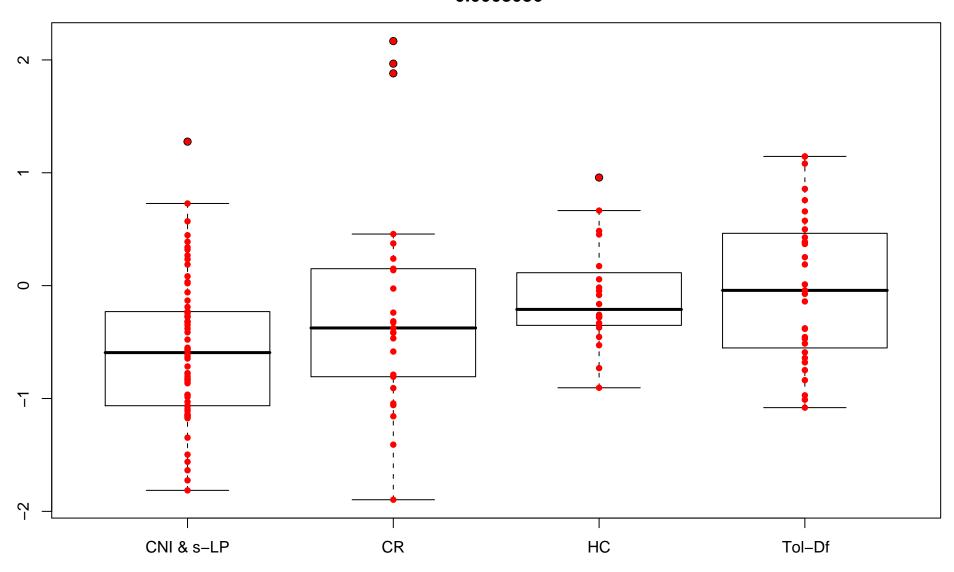
Rank 688 : FAM152A 0.0008008



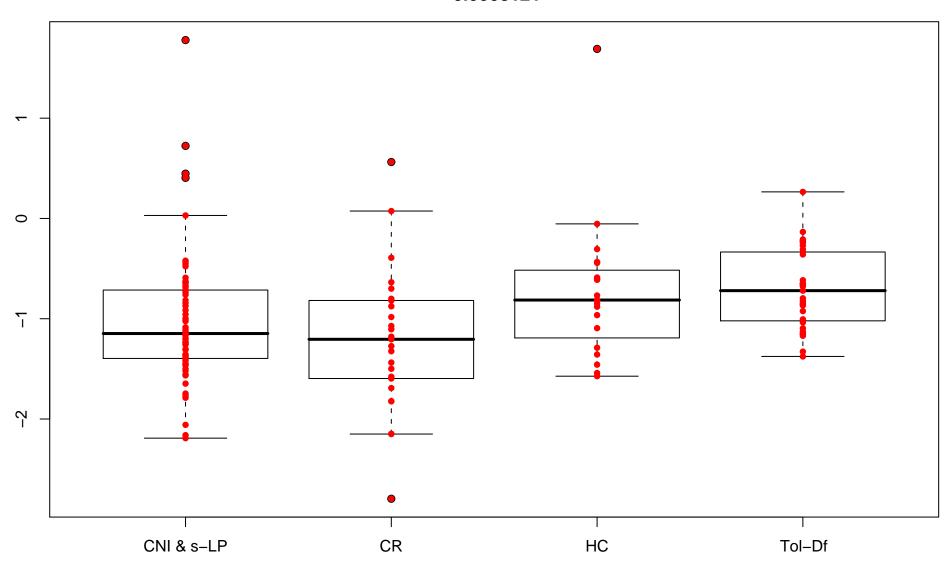
Rank 689 : JDP2 0.0008065



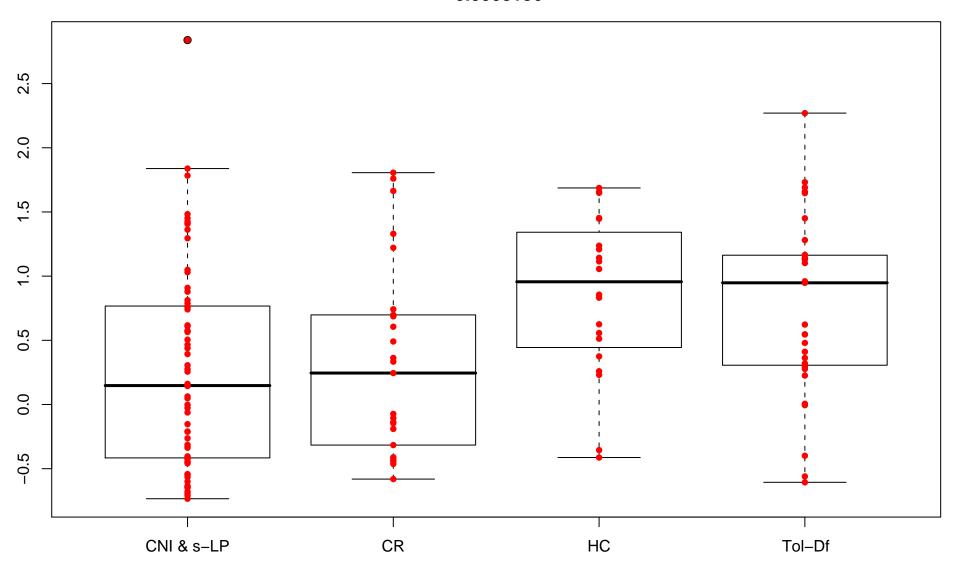
Rank 690 : AFF3 0.0008086



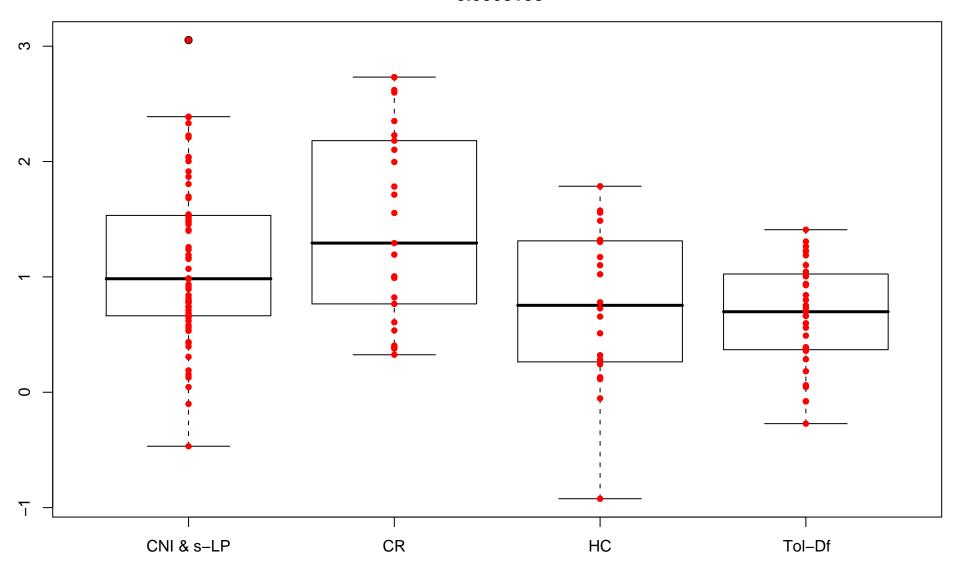
Rank 691 : CENPM 0.0008121



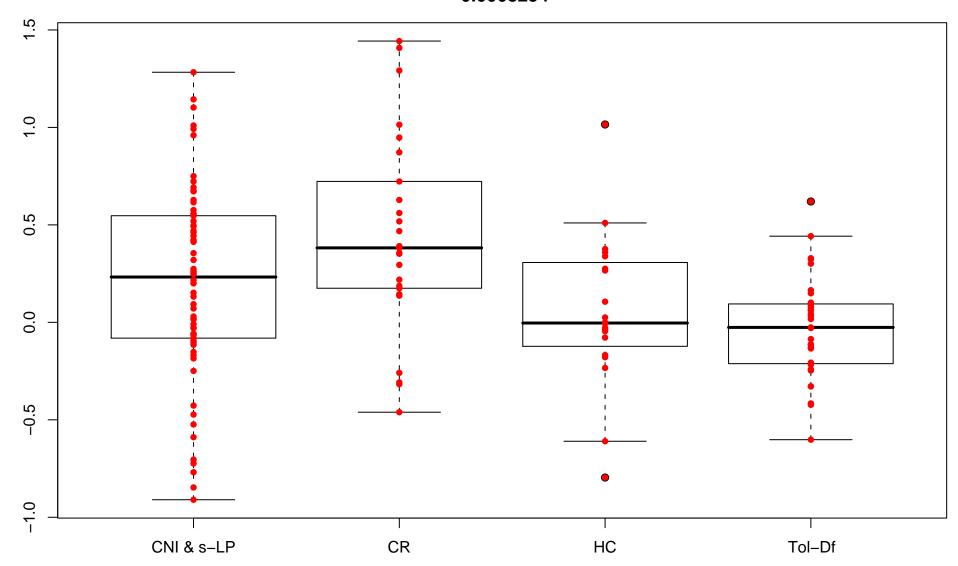
Rank 692: LOC342892 0.0008186



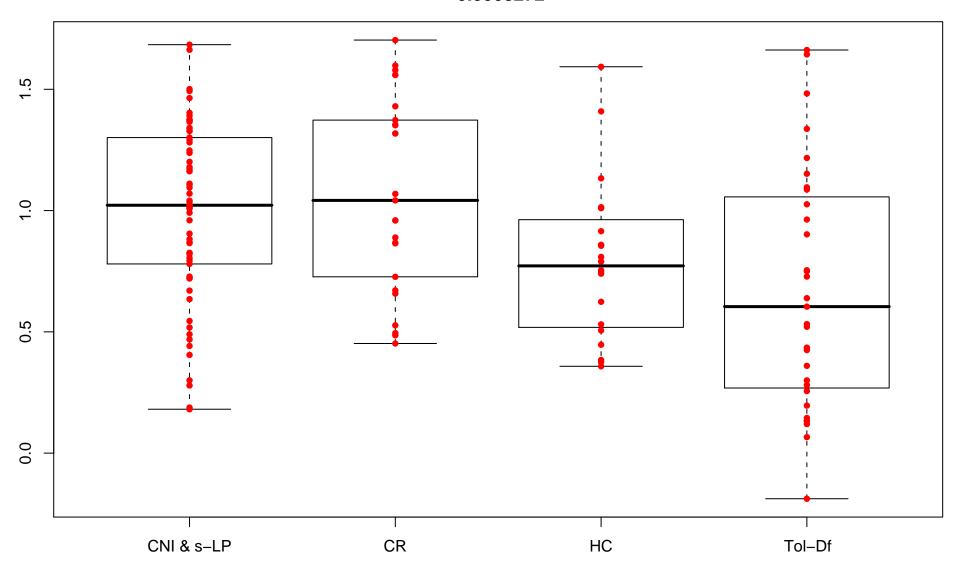
Rank 693 : MICAL2 0.0008188



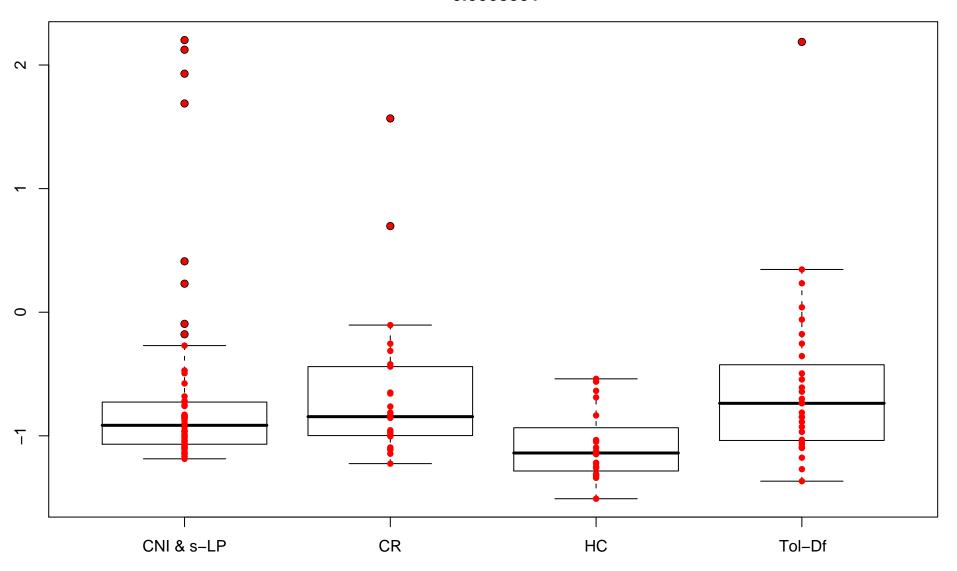
Rank 694 : SPATA6 0.0008254



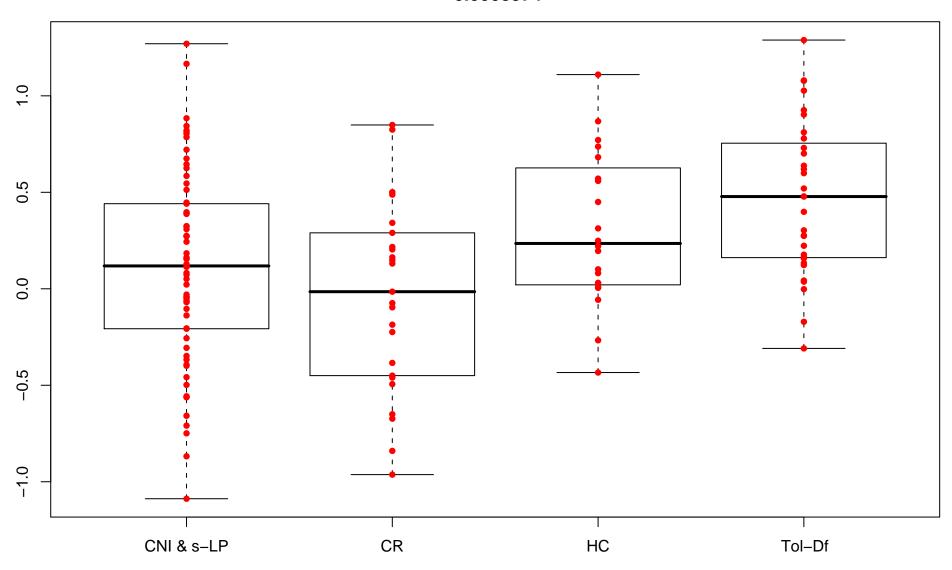
Rank 695 : LILRB2 0.0008272



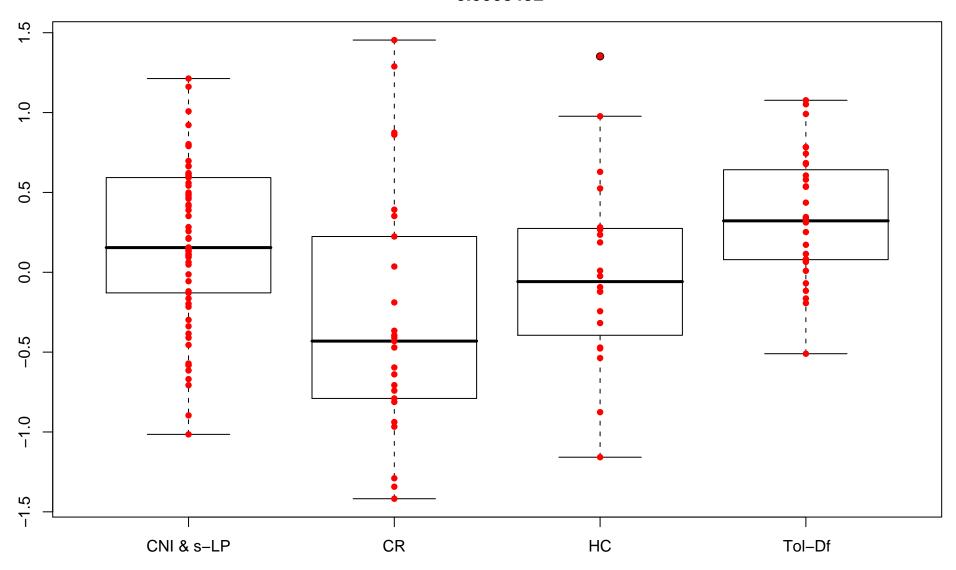
Rank 696 : CCDC46 0.0008331



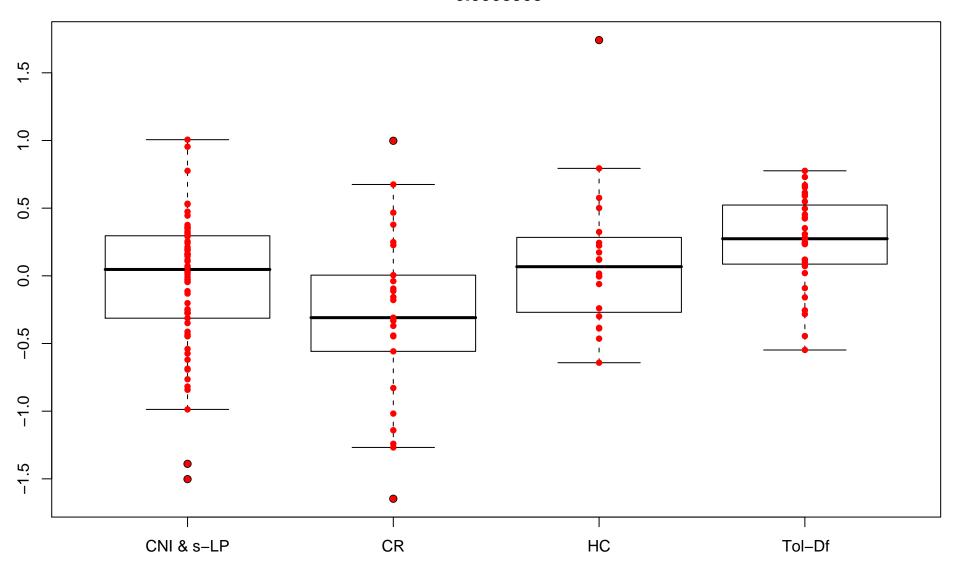
Rank 697 : TTC27 0.0008374



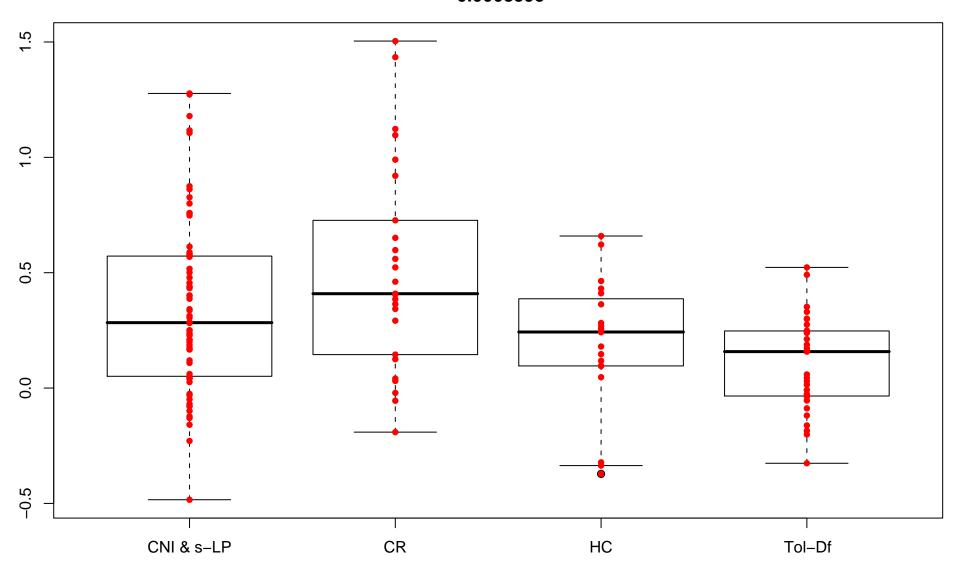
Rank 698 : PDGFB 0.0008452



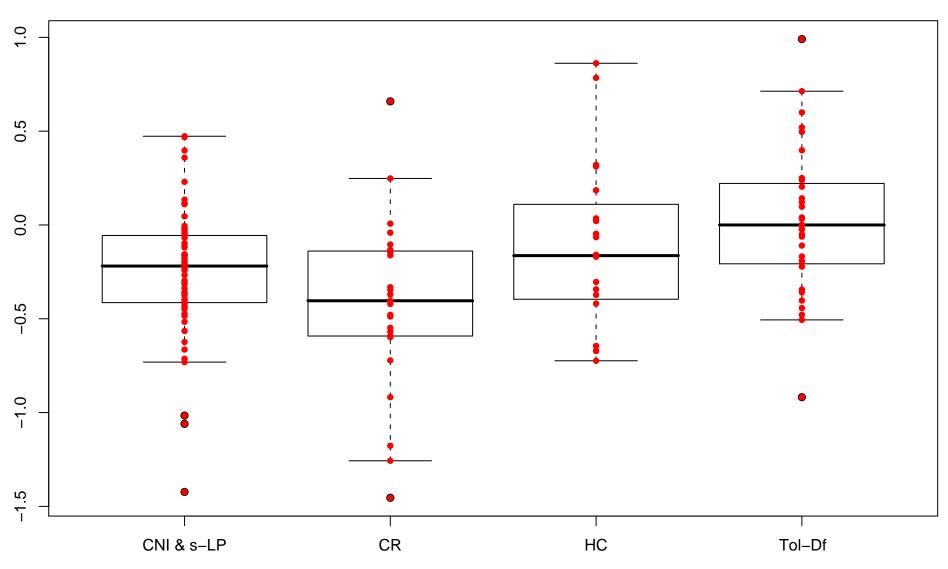
Rank 699 : ZAP70 0.0008503



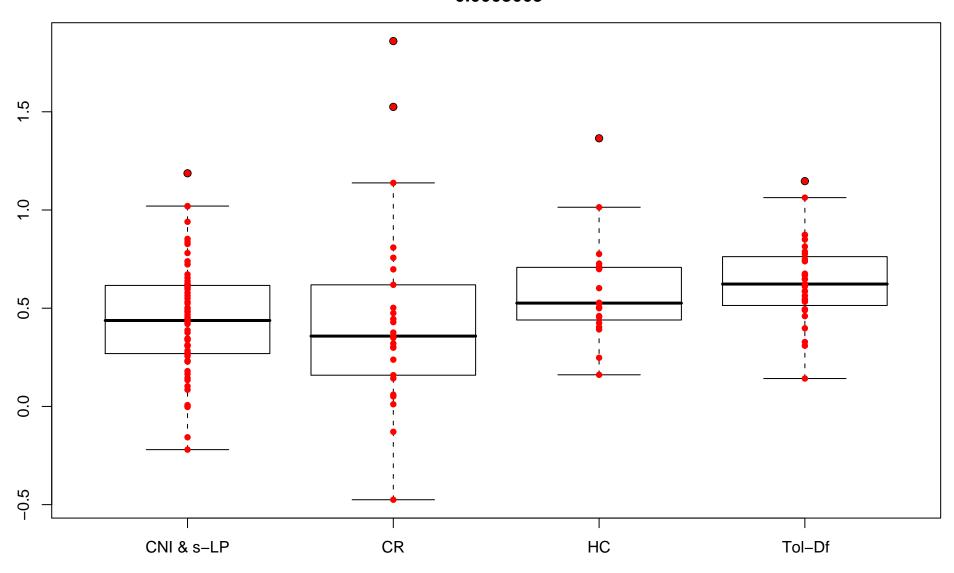
Rank 700 : BCL2L13 0.0008595



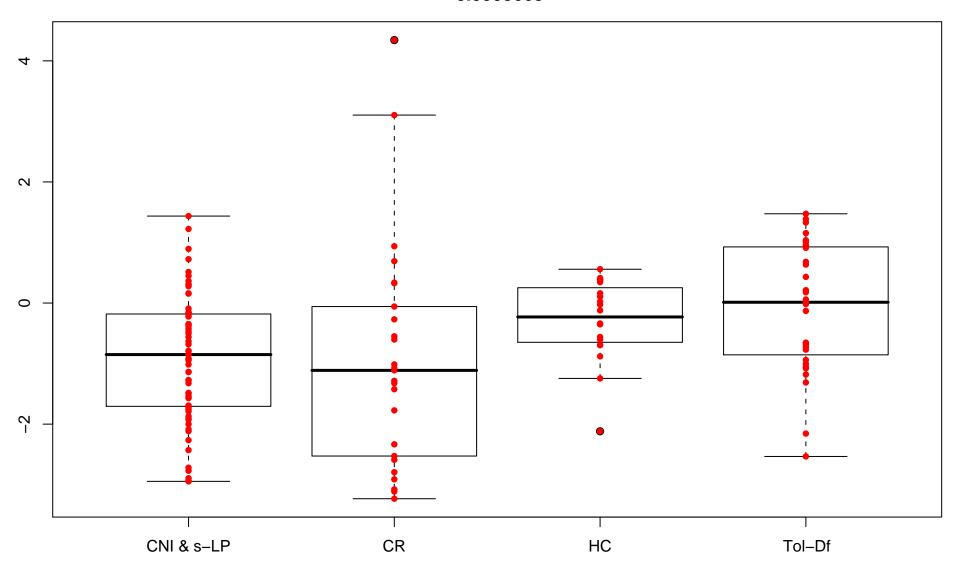
Rank 701: LOC731062 0.0008633



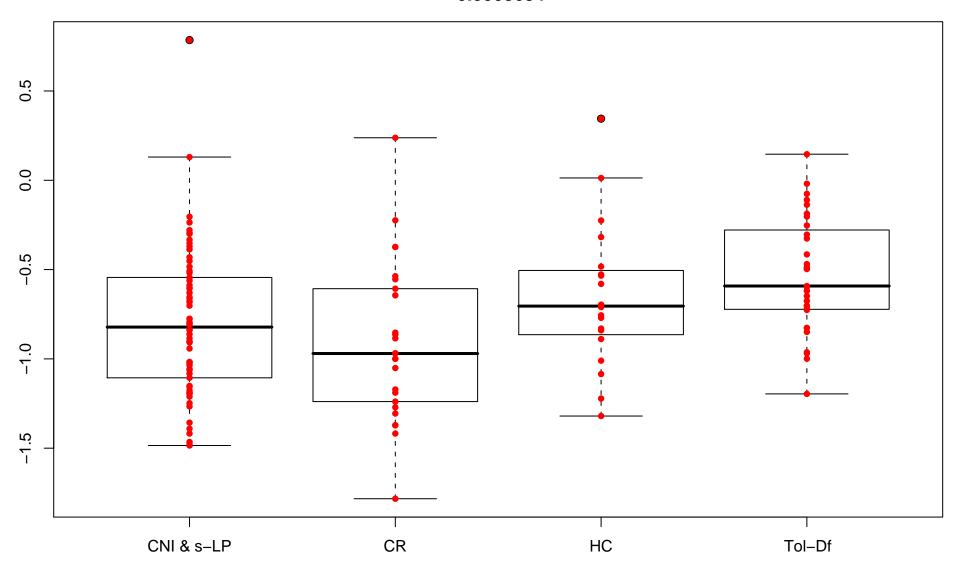
Rank 702 : DEPDC5 0.0008663



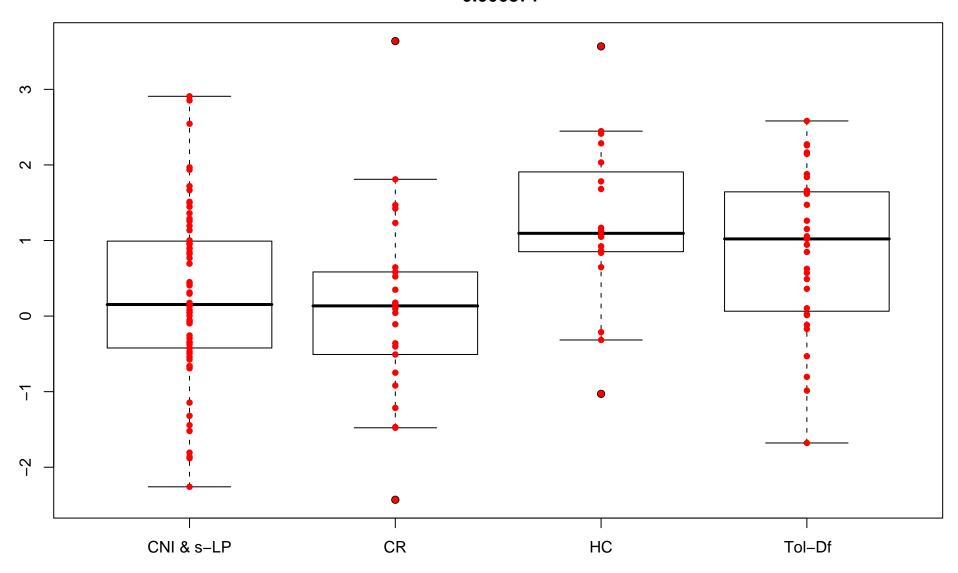
Rank 703 : THC2385462 0.0008663



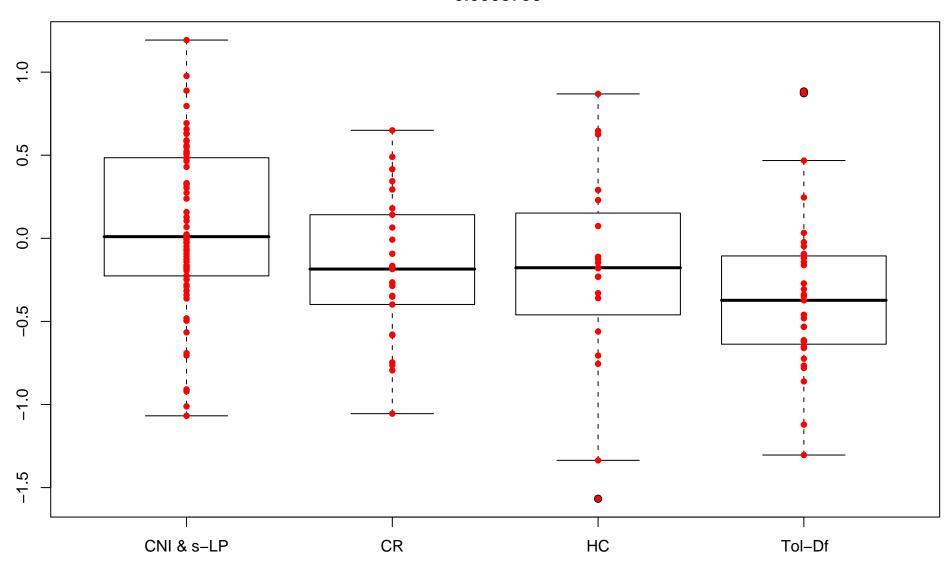
Rank 704 : CKS1B 0.0008684



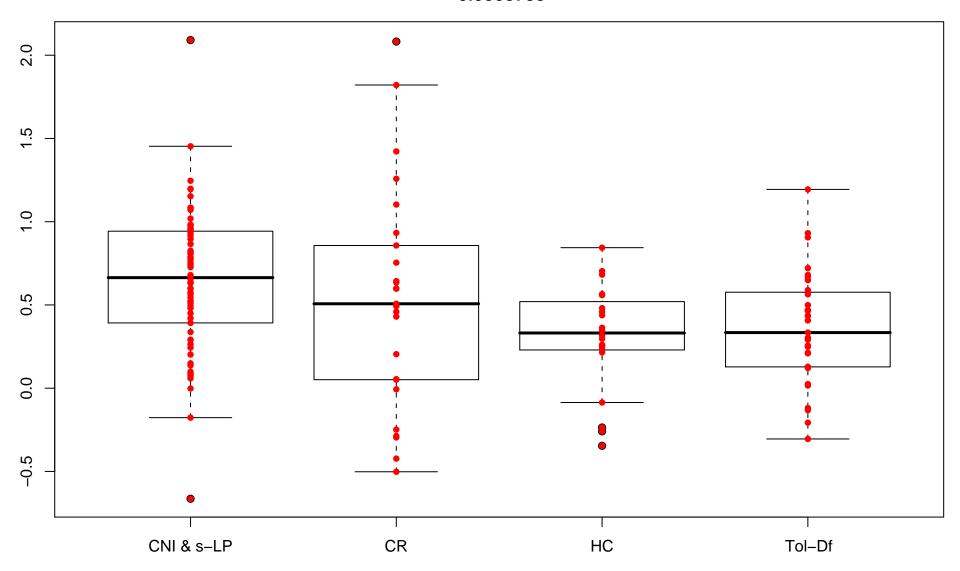
Rank 705 : ADAMTS7;LOC388194;LOC390660;LOC400406;LOC400419;LOC441730;LOC642935 0.000871



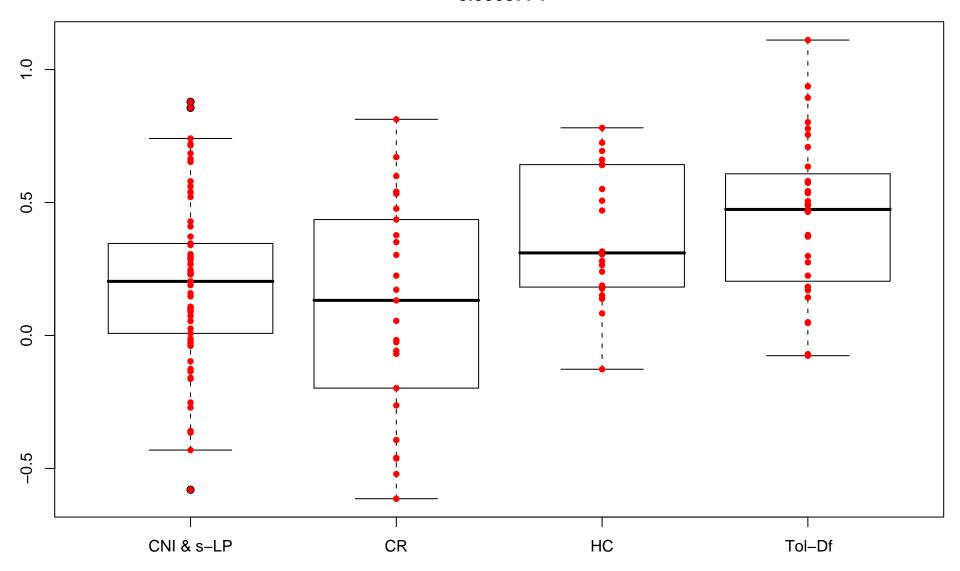
Rank 706 : SLC2A3 0.0008738



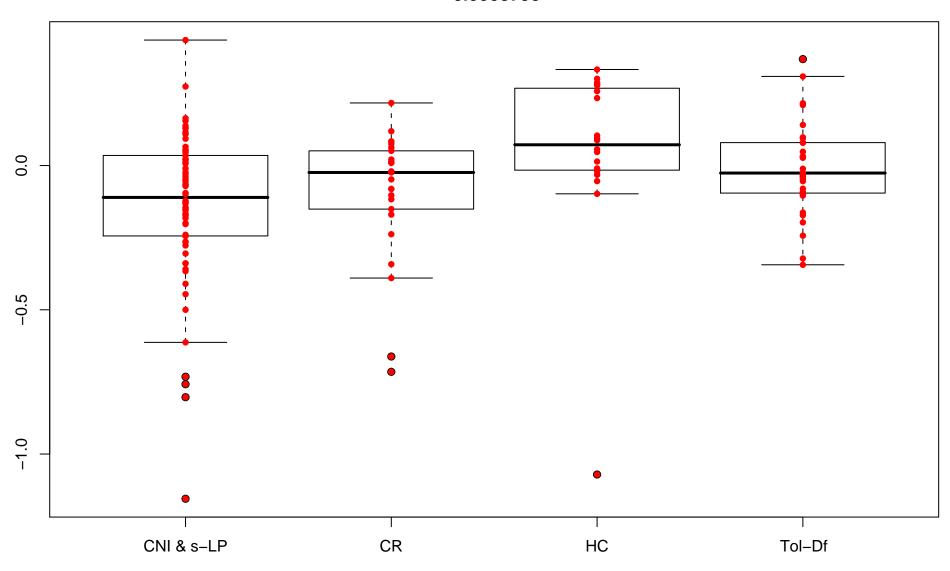
Rank 707 : ZAK 0.0008759



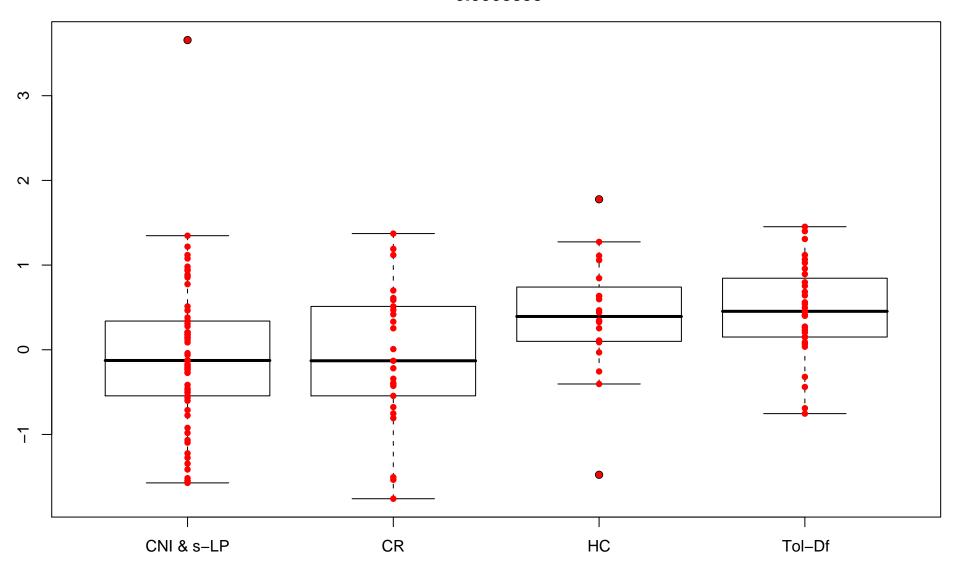
Rank 708 : KIAA0494 0.0008774



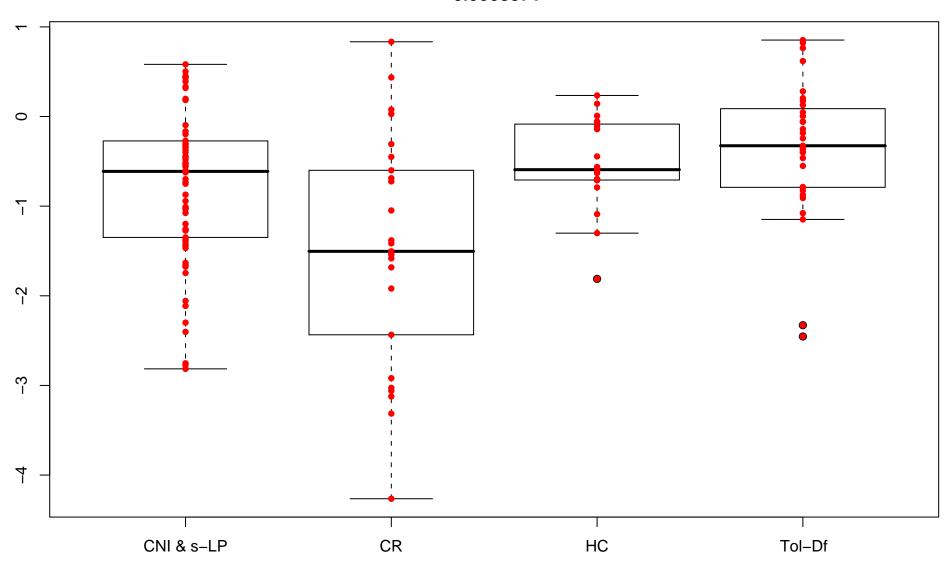
Rank 709 : MFAP1 0.0008795



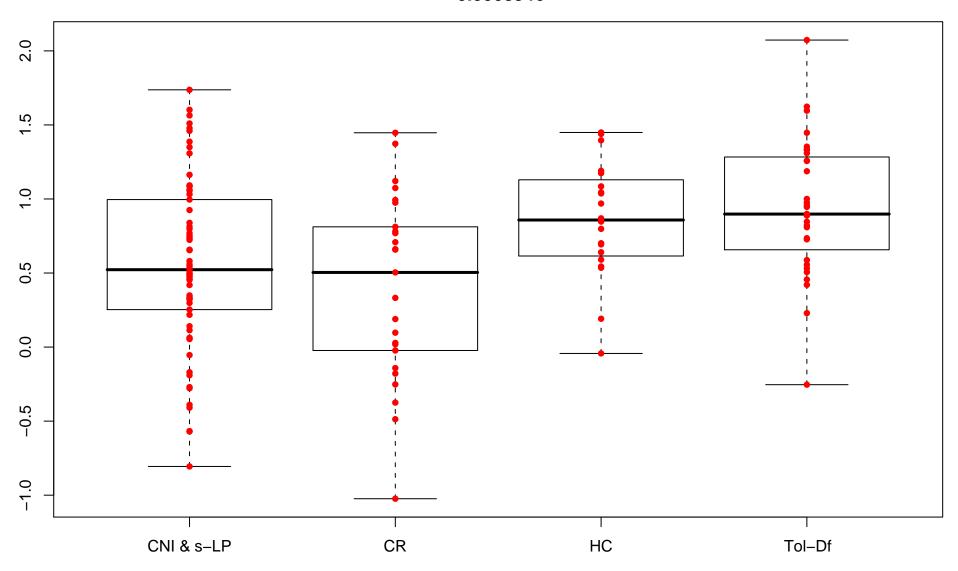
Rank 710 : USP45 0.0008855



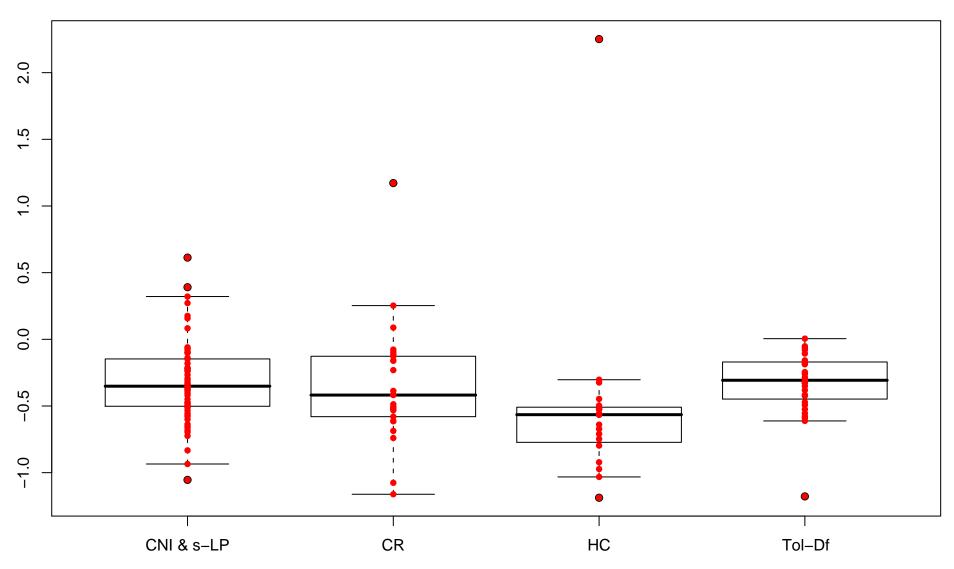
Rank 711 : LOC283788 0.0008871



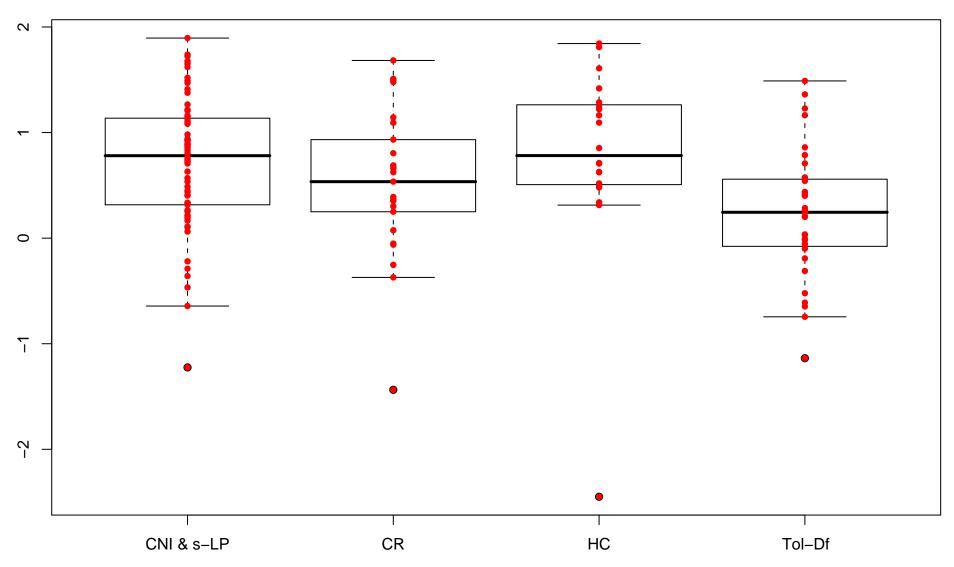
Rank 712 : PFAS 0.0008946



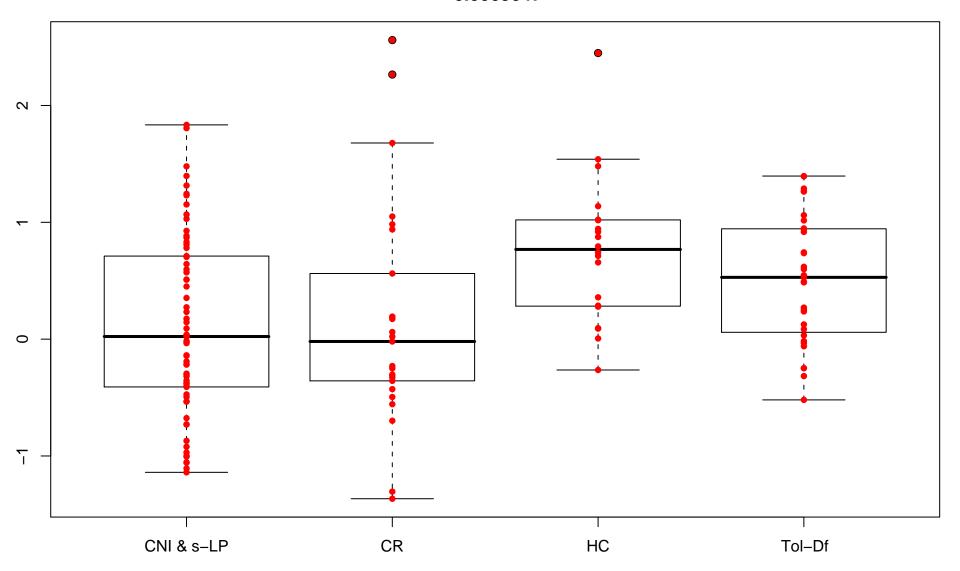
Rank 713 : DIDO1 0.0008957



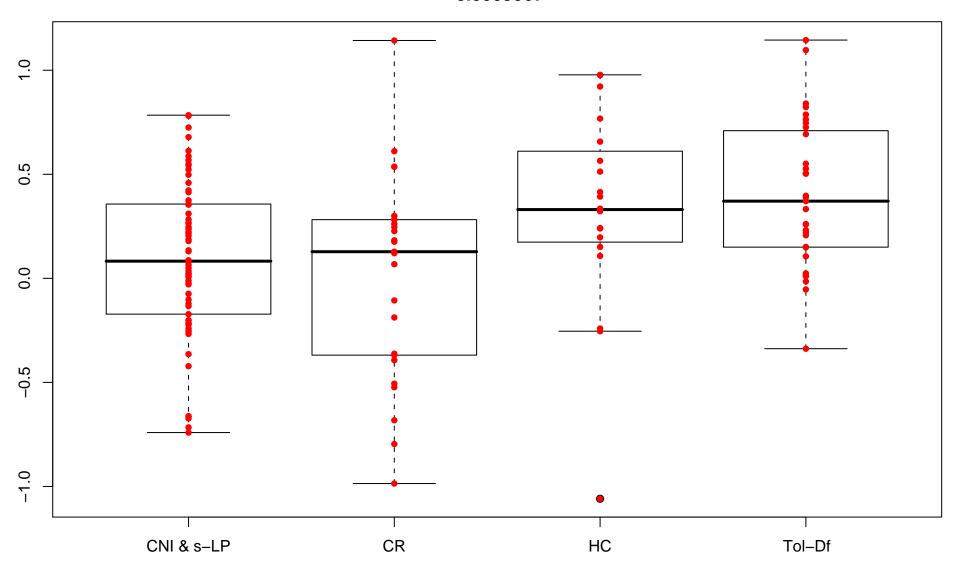
Rank 714 : THC2380706 0.0009037



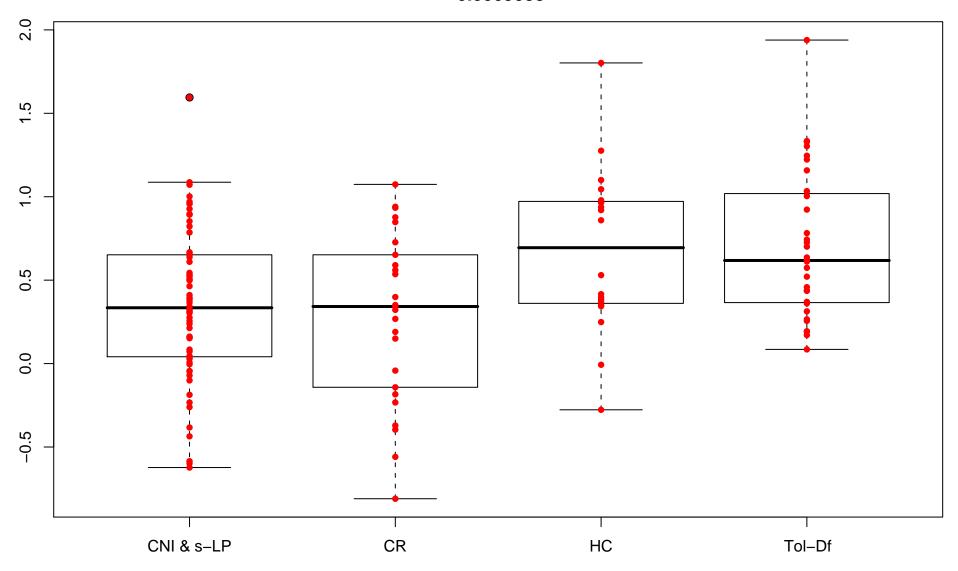
Rank 715 : PLD4 0.0009047



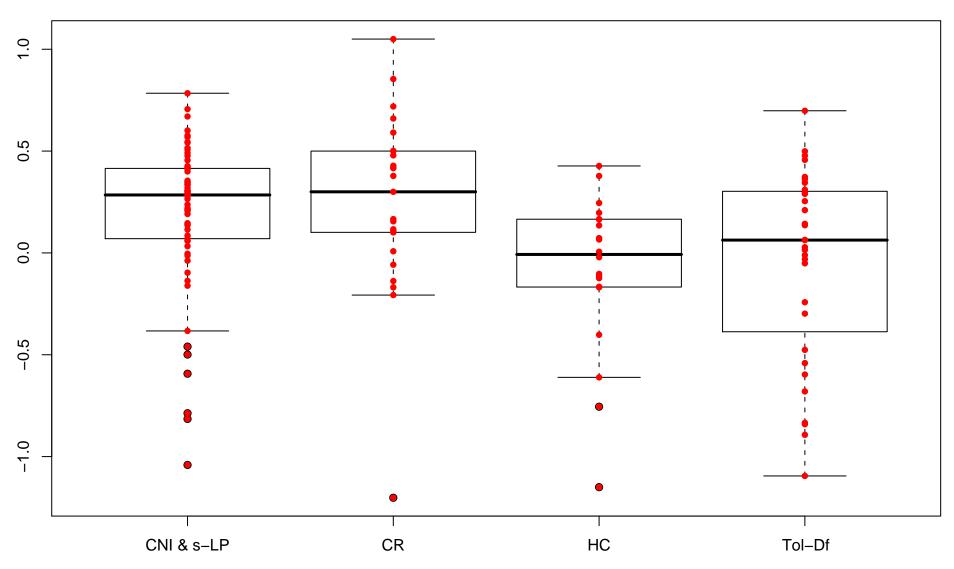
Rank 716: MTX2 0.0009067



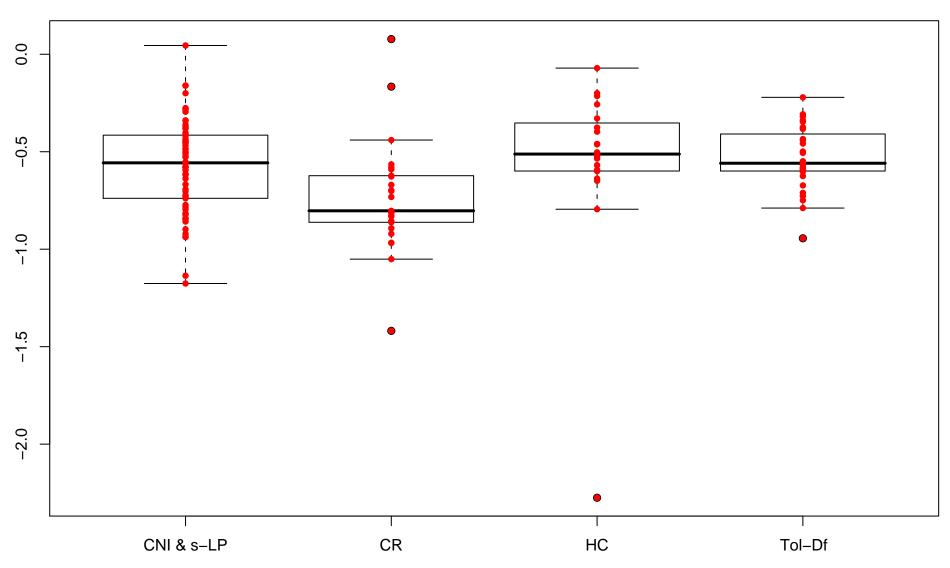
Rank 717 : DDX10 0.0009088



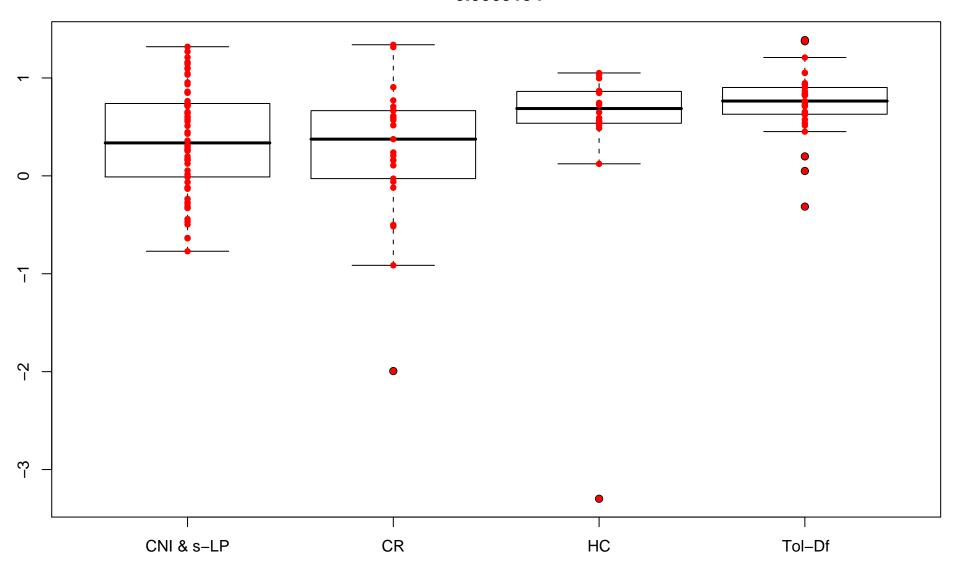
Rank 718 : DKFZP564A0769 0.0009109



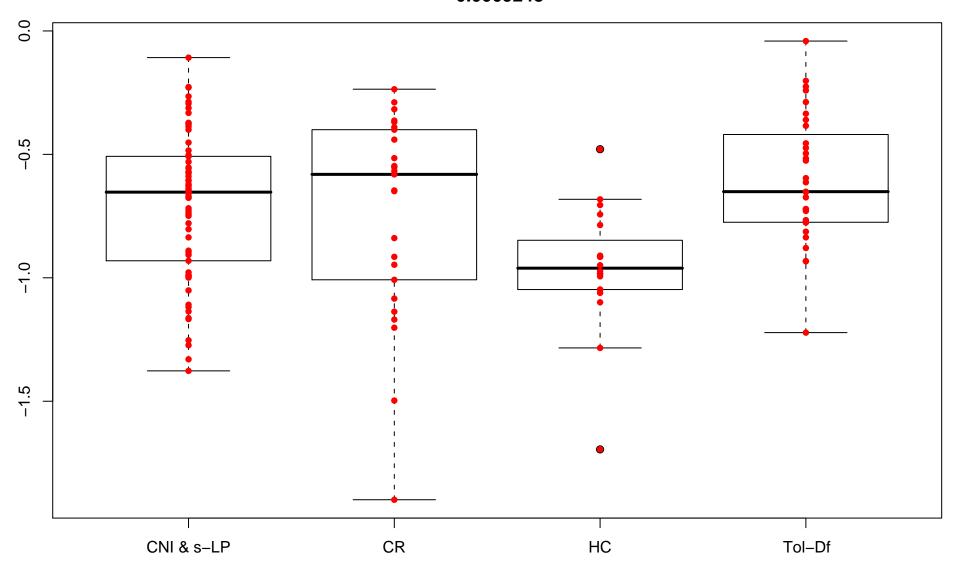
Rank 719 : HBXIP 0.0009123



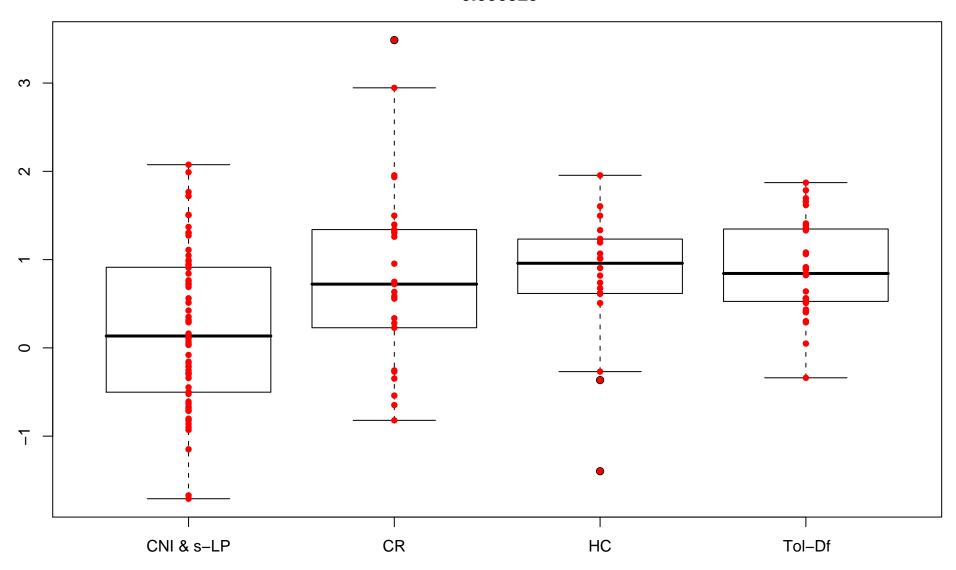
Rank 720 : SR140 0.0009194



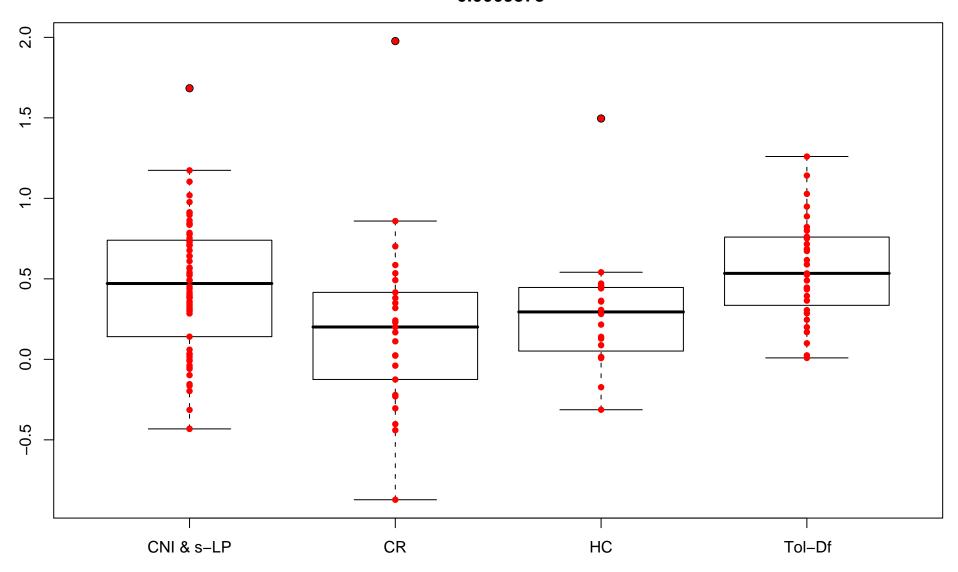
Rank 721 : ORMDL2 0.0009248



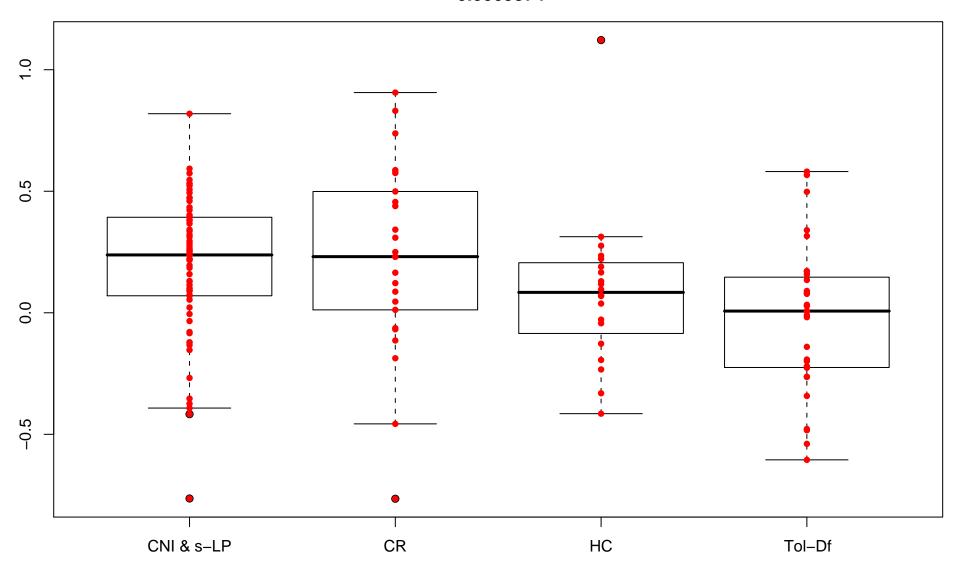
Rank 722 : THC2377375 0.000929



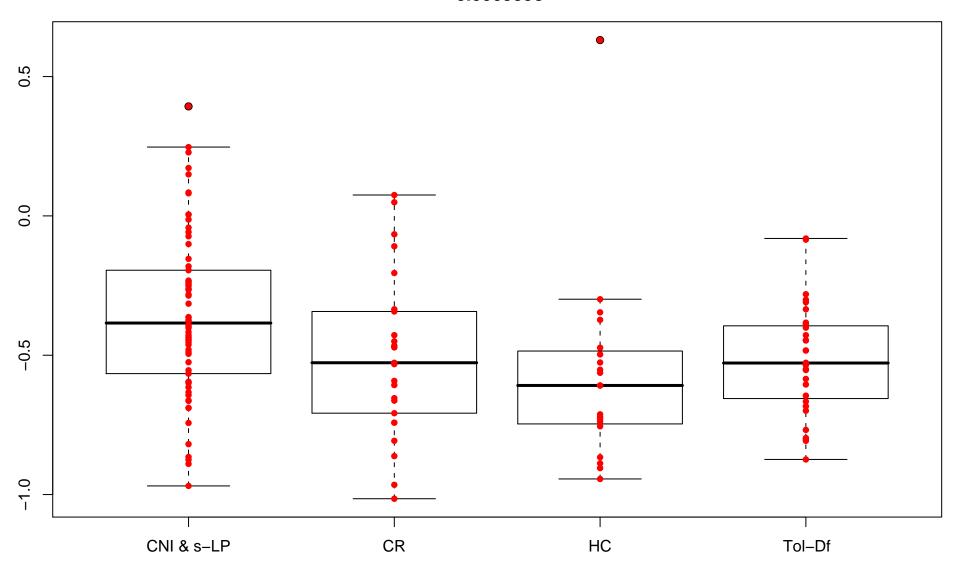
Rank 723 : LAX1 0.0009373



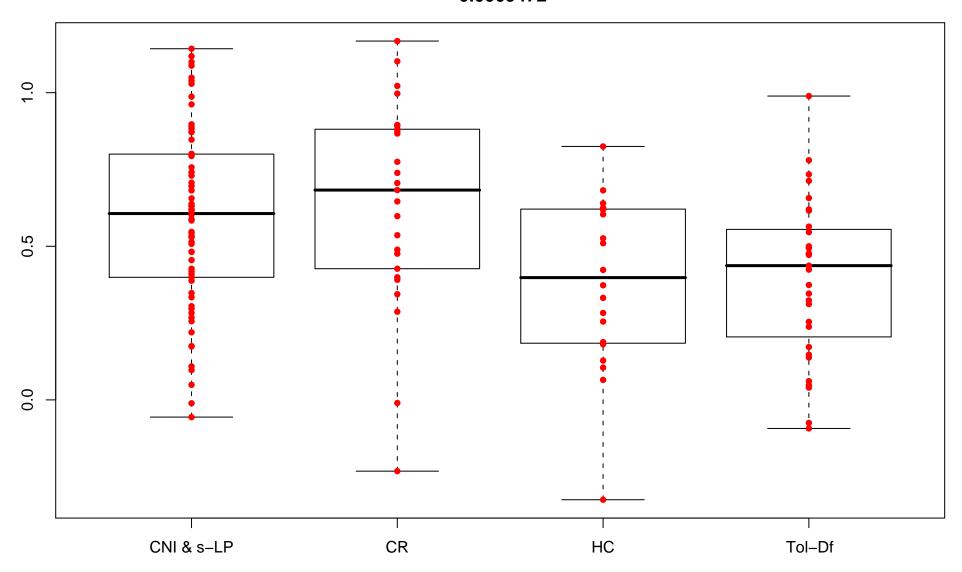
Rank 724 : LRRC25 0.0009374



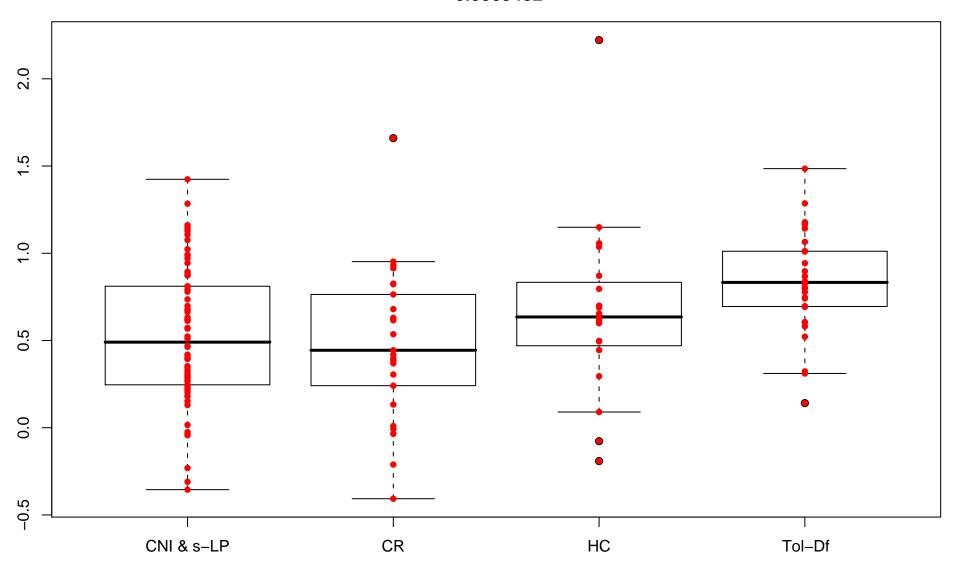
Rank 725 : AP3S2 0.0009398



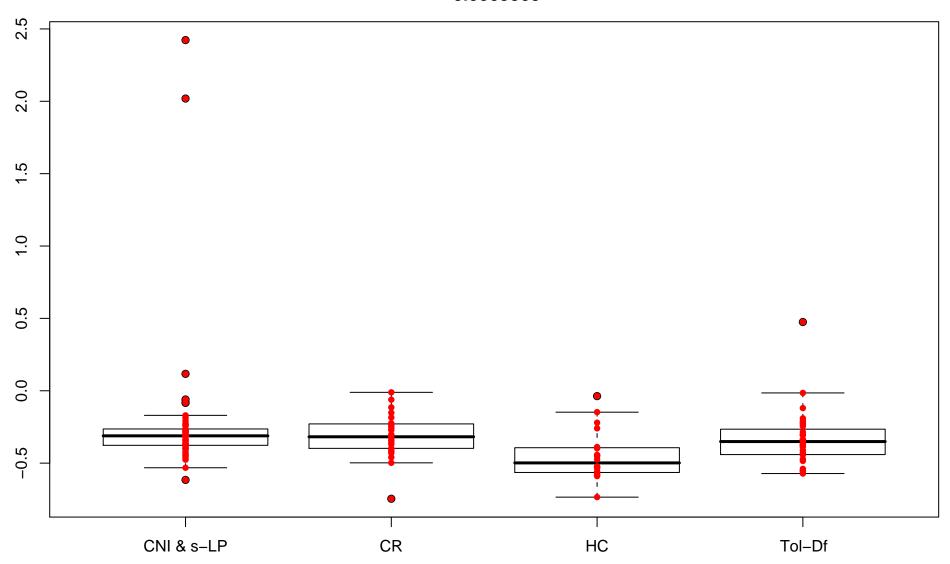
Rank 726 : SYK 0.0009472



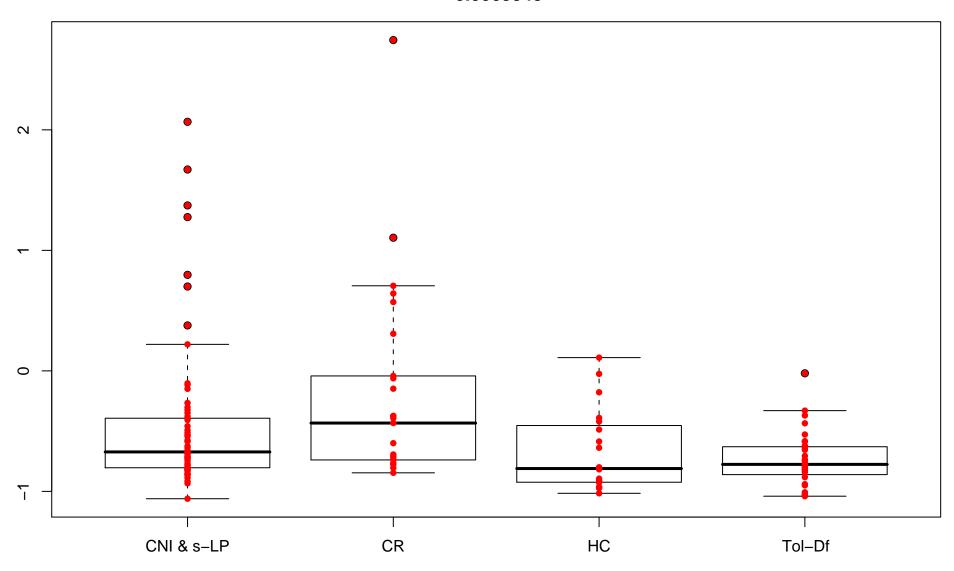
Rank 727 : POLRMT 0.0009482



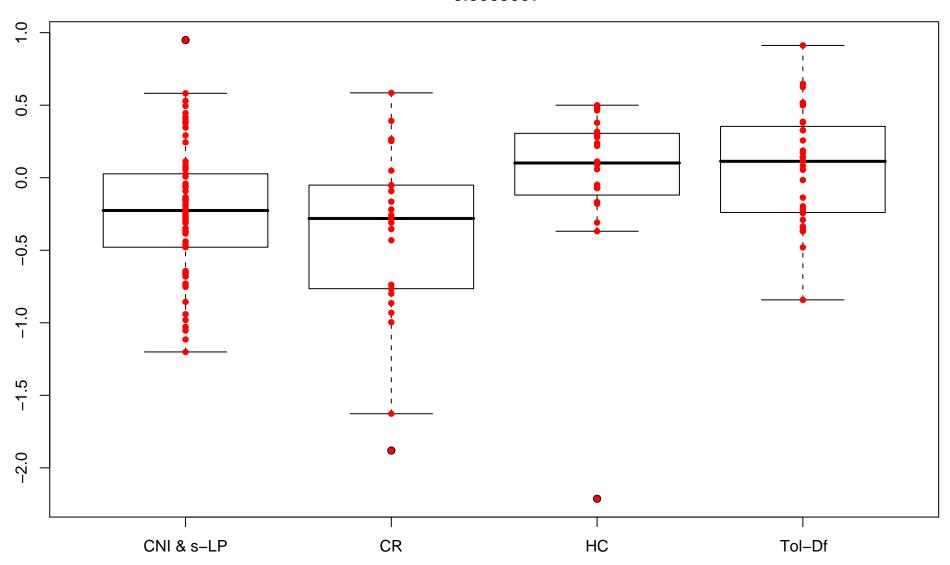
Rank 728 : OMD 0.0009509



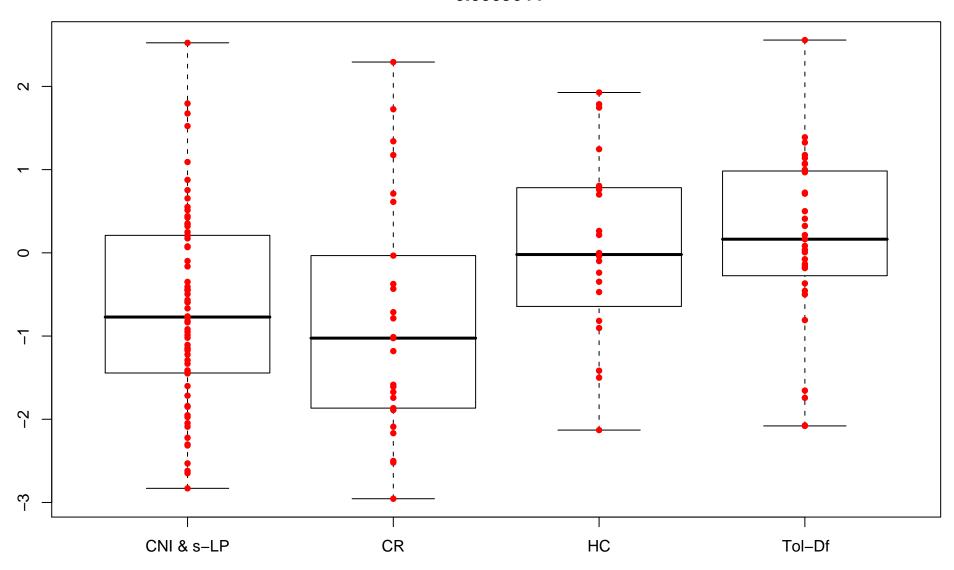
Rank 729 : KIR3DX1 0.0009545



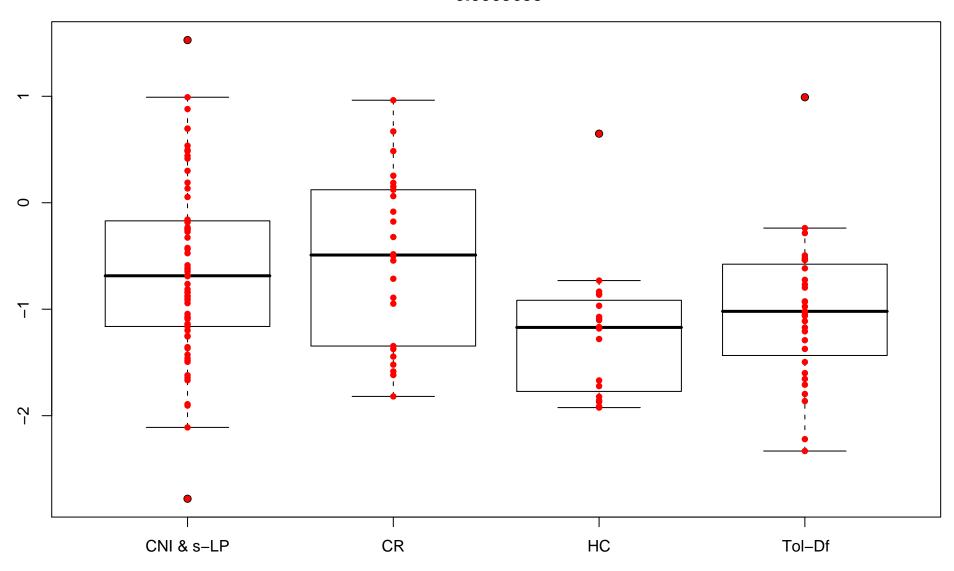
Rank 730 : TMED10 0.0009557



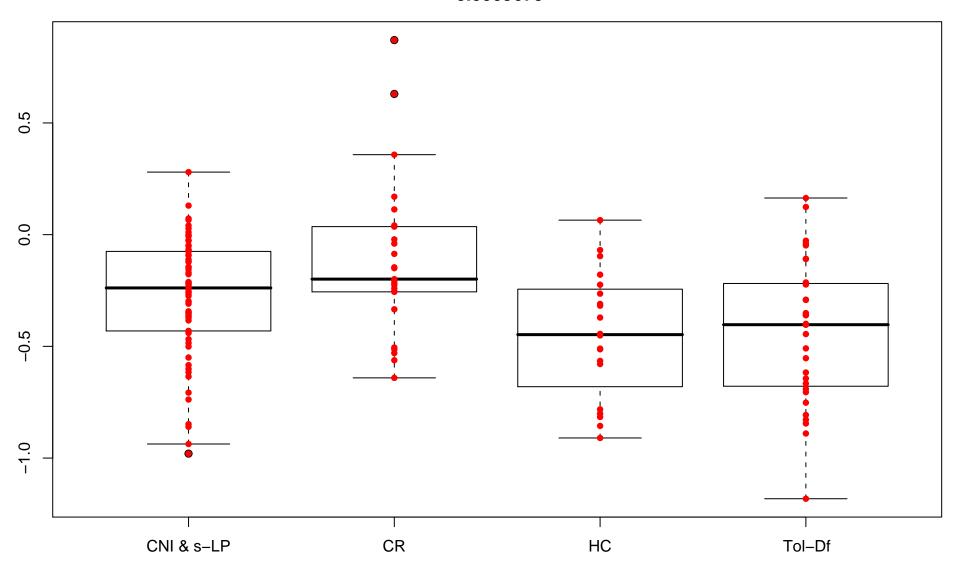
Rank 731 : FA2H 0.0009644



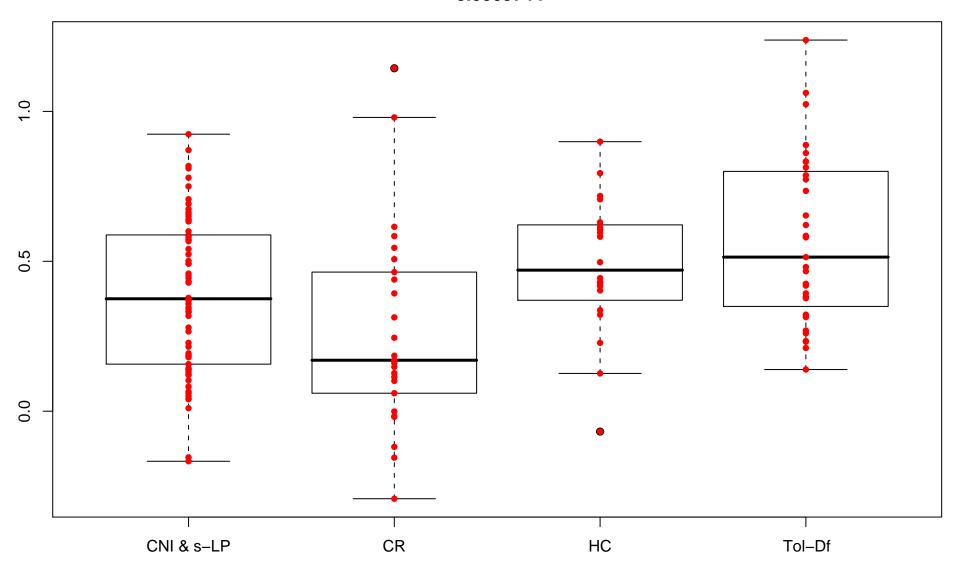
Rank 732 : MXD1 0.0009655



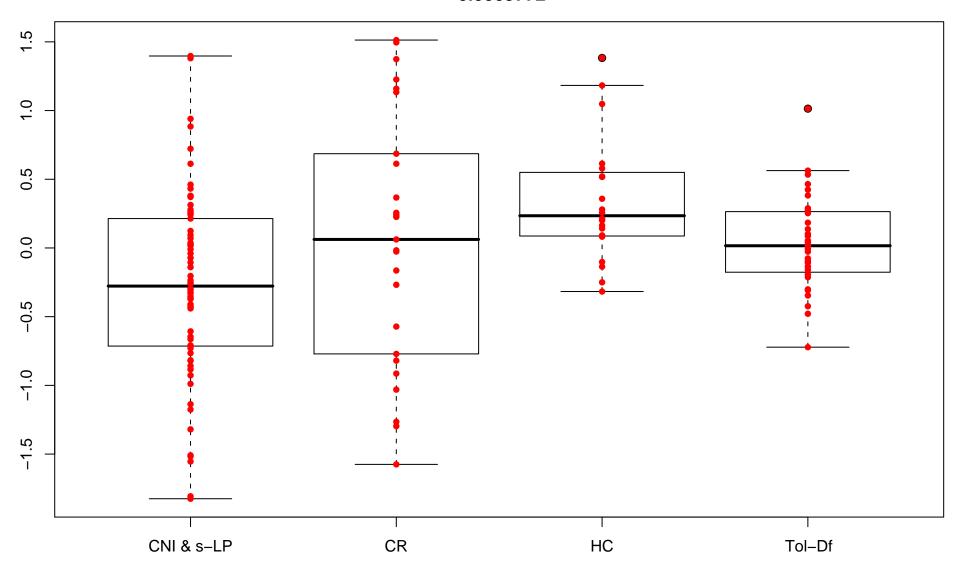
Rank 733 : ITSN2 0.0009679



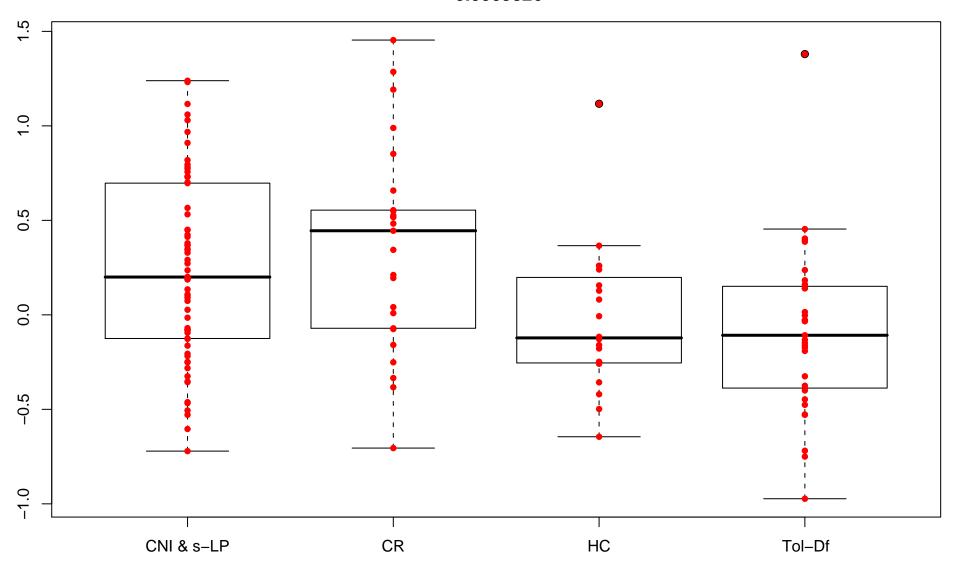
Rank 734 : POLG2 0.0009744



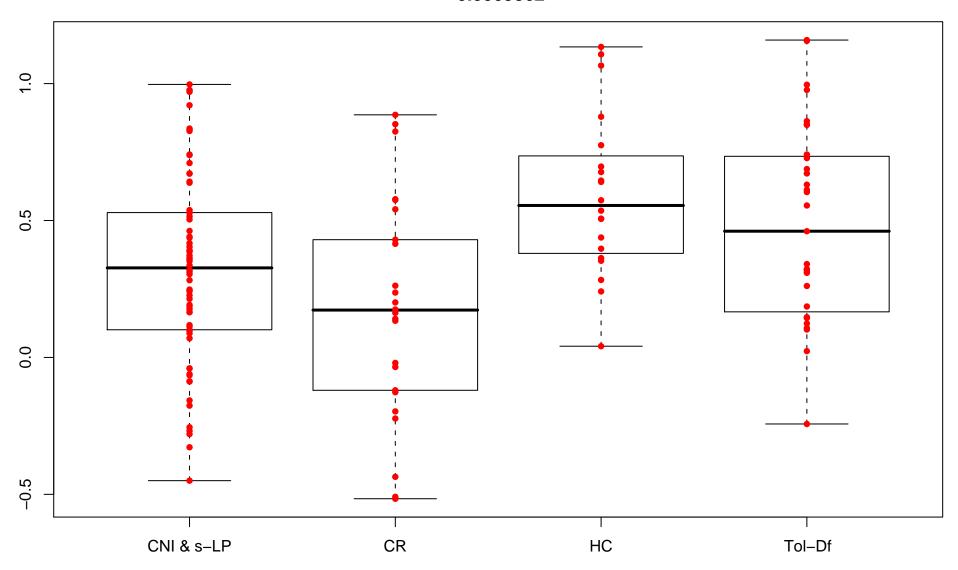
Rank 735 : BACE2 0.0009772



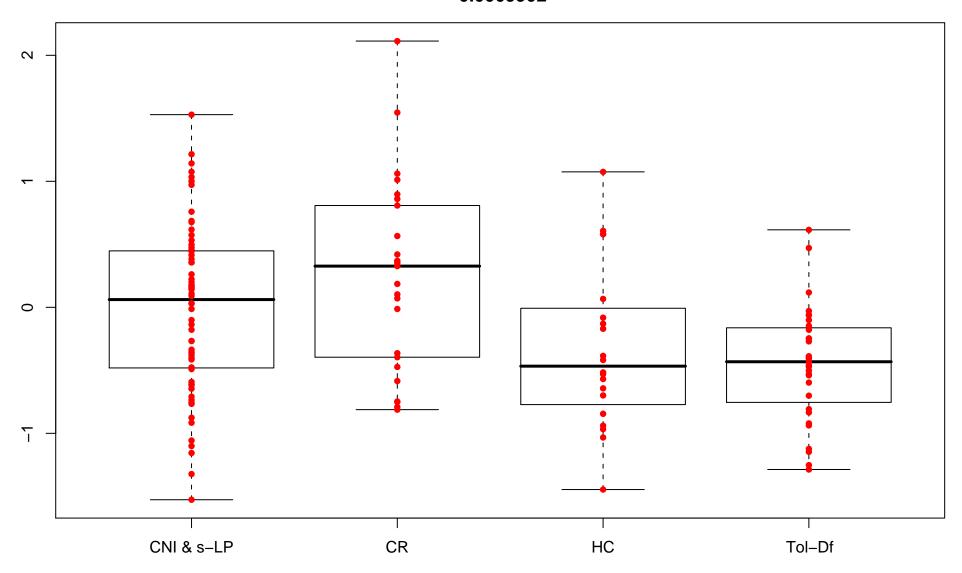
Rank 736 : SLC8A1 0.0009826



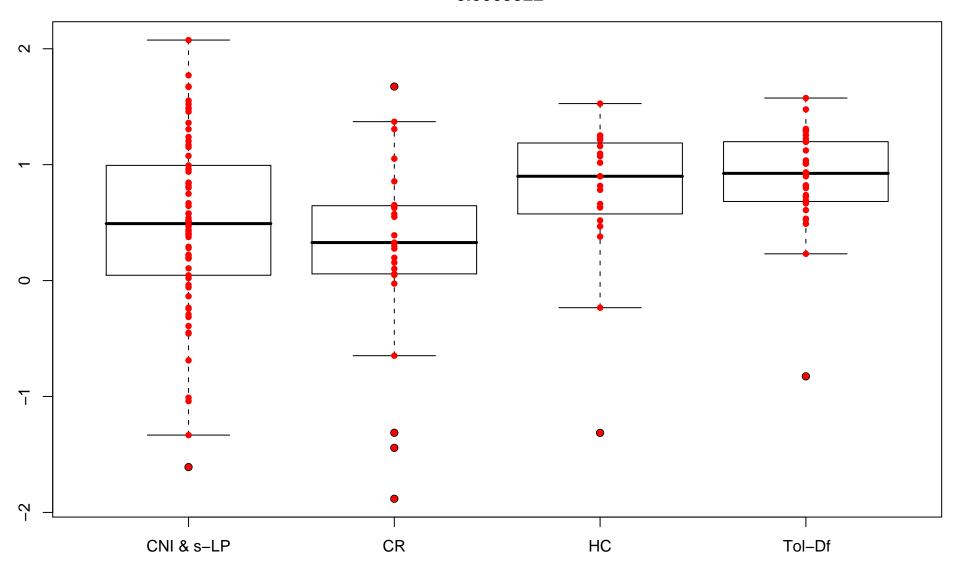
Rank 737: L3MBTL3 0.0009862



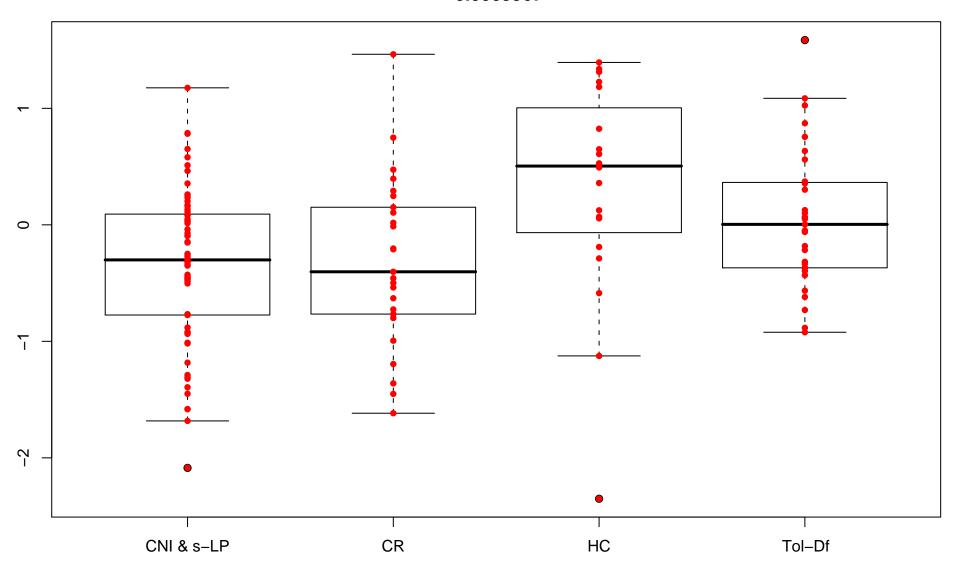
Rank 738 : ENTPD5 0.0009902



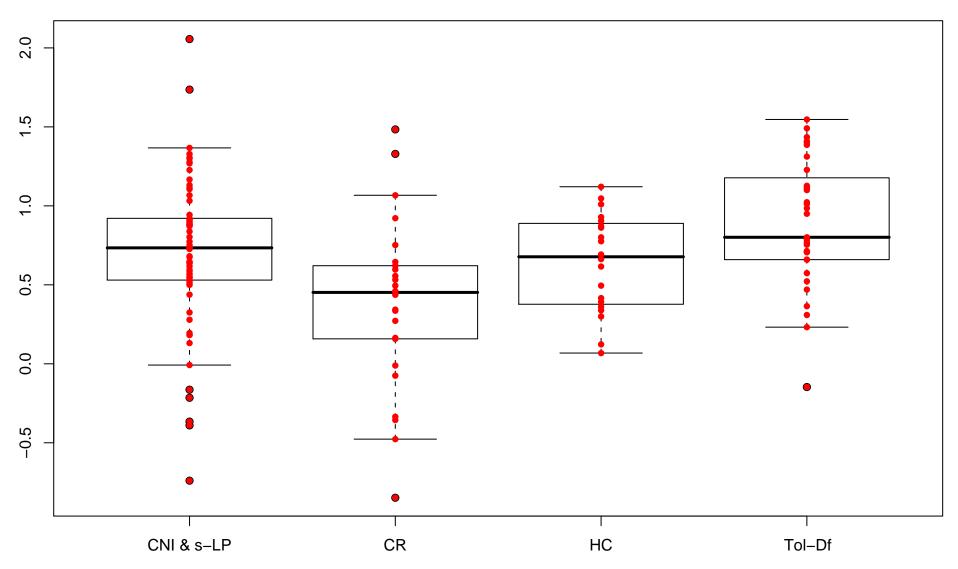
Rank 739 : KLHDC1 0.0009922



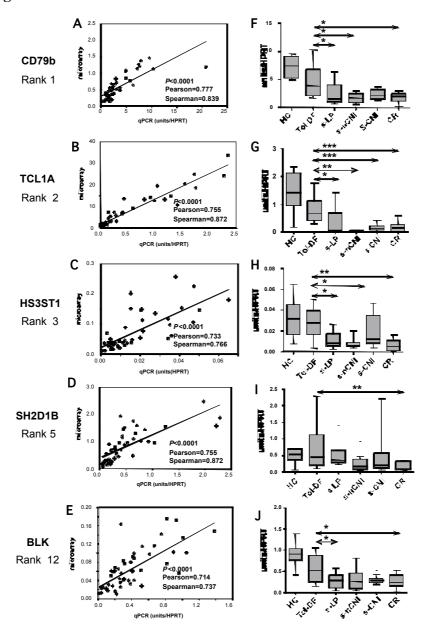
Rank 740 : CCR3 0.0009967



Rank 741 : STARD9 0.0010151

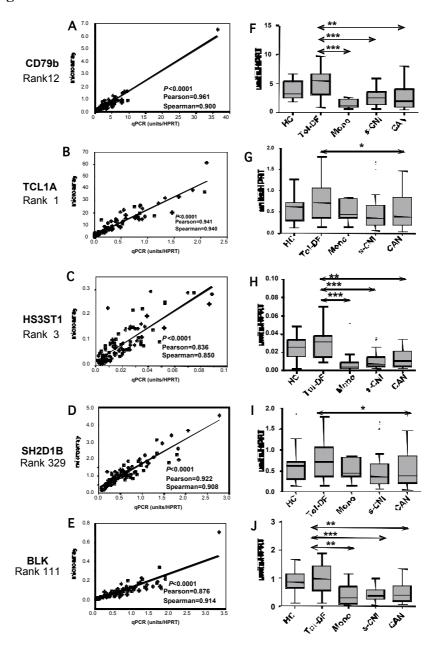


## **Supplemental Figure 6**



Supplemental Figure 6. Correlation of gene expression analysis within the *training set* determined by microarray and qRT-PCR methods. Correlation of gene expression by microarray and qRT-PCR for selected genes that displayed significantly differential expression (A – E) for *training set*. Signal intensity data of each probe on the microarray was calculated for each patient and expression relative to HPRT was then calculated for each gene as log2 [gene of interest] - log2 [HPRT]. qRT-PCR data are depicted as units / HPRT. Pearson and Spearman rank correlation coefficients and p-values are shown. RT-PCR gene expression data for the same set of genes is shown in F – J). Median Box-plots show median and interquartile range. Whiskers above and below the box indicate the  $5^{th}$  and  $95^{th}$  percentiles. Statistical comparison between groups was assessed by Mann-Whitney U test and significant p values are shown (\*p<0.05, \*\* p<0.01, \*\*\* p<0.001).

## **Supplemental Figure 7**



Supplemental Figure 7. Correlation of gene expression analysis within the *test set* determined by microarray and qRT-PCR methods. Correlation of gene expression by microarray and qRT-PCR for selected genes that displayed significantly differential expression (A - E) for *test set*. Signal intensity data of each probe on the microarray was calculated for each patient and expression relative to HPRT was then calculated for each gene as log2 [gene of interest] - log2 [HPRT]. qRT-PCR data are depicted as units / HPRT. Pearson and Spearman rank correlation coefficients and p-values are shown. RT-PCR gene expression data for the same set of genes is shown in F – J). Boxplots show median and interquartile range. Whiskers above and below the box indicate the  $5^{th}$  and  $95^{th}$  percentiles. Statistical comparison between groups was assessed by Mann-Whitney U test and significant p values are shown (\*p<0.05, \*\* p<0.01, \*\*\* p<0.001).

Supplemental Table 1. Study group statistical comparisons of percentage distributions of peripheral blood lymphocyte subsets analysed by flow cytometry. Two-sided p values for Mann-Whitney U tests performed between non-tolerant patient groups of (A) the *training set* and (B) the *test set* when analysing the percentage distribution of peripheral blood lymphocyte subsets by flow cytometry.

Table 1A

Training Set	HC vs s-LP	HC vs s-nCNI	HC vs s-CNI	HC vs CR	s-LP vs s-nCNI	s-LP vs s-CNI	s-LP vs CR	s-nCNI vs s-CNI	s-nCNI vs CR	s-CNI vs CR
% T cells	n.s.	0.044	n.s.	n.s.	0.03	0.028	n.s.	n.s.	n.s.	n.s.
% B cells	n.s.	0.001	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
% NK cells	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Ratio B/T	n.s.	0.002	n.s.	n.s.	0.044	n.s.	n.s.	n.s.	n.s.	n.s.
% CD4 <sup>+</sup> CD25 <sup>int</sup>	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
% CD4 <sup>+</sup> CD25 <sup>hi</sup>	n.s.	n.s.	n.s.	n.s.	n.s.	0.026	n.s.	n.s.	n.s.	n.s.

Table 1B

Test Set	HC vs Mono	HC vs s-CNI	HC vs CAN	Mono vs s-CNI	Mono vs CAN	s-CNI vs CAN
% T cells	n.s.	0.006	n.s.	0.025	n.s.	0.033
	< 0.00	< 0.00				
% B cells	1	1	0.046	n.s.	n.s.	n.s.
% NK cells	n.s.	n.s.	n.s.	0.009	n.s.	n.s.
	< 0.00					
Ratio B/T	1	0.001	n.s.	n.s.	n.s.	n.s.
% CD4 <sup>+</sup> CD25 <sup>int</sup>	0.016	0.002	0.005	n.s.	n.s.	n.s.
% CD4 <sup>+</sup> CD25 <sup>hi</sup>	0.001	0.004	n.s.	n.s.	n.s.	n.s.

Supplemental Table 2: Study group statistical comparisons of the ratio of FoxP3 and \_1,2-mannosidase expression detected in peripheral blood. Two-sided p values for the Mann-Whitney U test performed on the calculated ratio of FoxP3 and \_1,2-mannosidase expression between non-tolerant patient groups of the (A) the *training set* and (B) the *test set*.

Table 2A

Training Set	HC vs s-LP	HC vs s-nCNI			s-LP vs s-nCNI		s-LP vs CR	s-nCNI vs s-CNI	s-nCNI vs CR	s-CNI vs CR
P values	0.004	< 0.001	<0.001	<0.00	n.s.	0.005	< 0.001	n.s.	0.013	0.002

## Table 2B

Test Set	HC vs Mono	HC vs s-CNI	HC vs CAN	Mono vs s-CNI	Mono vs CAN		s-CNI vs CAN
P values	0.004	<0.001	<0.00	n.s.	n.s.		n.s.

## Supplemental Table 3A. List of probes within the *training* and *test sets* with significant differential expression identified by four-class analysis of microarray data.

Complete list of 260 probes within (A) *training set* and 1378 probes within (B) *test set* with significant differential expression identified following four-class analysis, listed in order of ranked significance, with corresponding microarray probe ID and EntrezGene ID (where assigned). Probes were ranked on p values by Kruskal-Wallis test with adjustment for False Discovery Rate (FDR) at 1%.

	Training set								
Rank	Gene Name	EntrezGene ID	Probe ID	P					
1	CD79B	974	A_23_P207201_riset1	7.3E-05					
2	TCL1A	8115	A_23_P357717_riset1	7.7E-05					
3	HS3ST1	9957	A_23_P121657_riset1	7.7E-05					
4	TCL1A	8115	MIL_PPPID394307780_riset1	7.8E-05					
5	SH2D1B	117157	A_32_P324533_riset1	9.0E-05					
6	MS4A1	931	MIL_PPPID394453510_riset1	9.6E-05					
7	TLR5	7100	A_23_P85903_riset1	1.0E-04					
8	THC2438936		A_32_P71876_riset1	1.0E-04					
9	PNOC	5368	A_23_P253321_riset1	1.5E-04					
10	SLC8A1	6546	A_32_P147078_riset1	1.7E-04					
11	FCRL2	79368	A_23_P160751_riset1	1.7E-04					
12	BLK	640	BLK_riset2	2.7E-04					
13	PCDH9	5101	A_24_P187218_riset1	2.8E-04					
14	CD200	4345	A_23_P121480_riset1	3.3E-04					
15	THC2317432		A_32_P124728_riset1	3.3E-04					
16	BCL11A	53335	A_24_P402588_riset1	3.5E-04					
17	TSPAN3	10099	A_23_P14804_riset1	4.5E-04					
18	CD79A	973	CD79A_riset2_piqor	5.0E-04					
19	CASP5	838	CASP5_riset2	5.1E-04					
20	FCRL5	83416	A_23_P201211_riset1	5.4E-04					
21	IL1RL2	8808	A_23_P56604_riset1	6.1E-04					
22	EBI2	1880	A_23_P25566_riset1	6.6E-04					
23	BLNK	29760	A_24_P64344_riset1	6.6E-04					
24	THC2340114		A_32_P192834_riset1	6.8E-04					
25	RNF24	11237	A_23_P120533_riset1	6.8E-04					

26	DIMT1L	27292	A_23_P58529_riset1	7.0E-04
27	EPO	2056	A_23_P145664_riset1	7.0E-04
28	ZAK	51776	A_23_P318300_riset1	7.1E-04
29	CD40	958	A_23_P57036_riset1	7.5E-04
30	CREB3L4	148327	A_23_P63232_riset1	7.6E-04
31	IGHM		A_24_P417352_riset1	7.8E-04
32	ADAM17	6868	A_32_P129621_riset1	8.0E-04
33	SH2D1B	117157	A_32_P324533_riset1	8.3E-04
34	AKR1C3	8644	A_23_P138543_riset1	8.4E-04
35	CASD1	64921	A_24_P69379_riset1	8.6E-04
36	FCRLA	84824	A_23_P46037_riset1	9.0E-04
37	BTLA	151888	MIL_PPPID399200354_riset1	9.4E-04
38	COL4A3BP	10087	A_23_P61748_riset1	9.7E-04
39	CLCN5	1184	CLCN5_riset2	9.8E-04
40	LHFPL2	10184	A_23_P255104_riset1	9.9E-04
41	ARG1	383	A_23_P111321_riset1	1.0E-03
42	ANXA3	306	A_23_P121716_riset1	1.0E-03
43	HLA-DOA	3111	A_32_P356316_riset1	1.1E-03
44	KLRF1	51348	A_32_P158966_riset1	1.1E-03
45	CD22	933	CD22_riset2	1.2E-03
46	TLR2	7097	A_23_P92499_riset1	1.2E-03
47	PLXDC2	84898	A_32_P187518_rev_riset1	1.3E-03
48	BCL7A	605	A_24_P203056_riset1	1.4E-03
49	VMO1	284013	A_23_P55356_riset1	1.4E-03
50	ADAMTS4	9507	A_23_P360754_riset1	1.4E-03
51	PTPRJ	5795	A_24_P921321_riset1	1.5E-03
52	IFNAR1	3454	MIL_PPPID397416299_riset1	1.5E-03
53	MAGEA10	4109	A_32_P17253_riset1	1.5E-03
54	HLA-DOB	3112	A_23_P30736_riset1	1.5E-03
55	CD163	9332	A_23_P33723_riset1	1.6E-03
56	FLJ32866		MIL_PPPID400032869_riset1	1.6E-03
57	EBF1	1879	A_24_P156501_riset1	1.7E-03
58	GPR92	57121	A_23_P204375_riset1	1.7E-03
59	COX11	1353	A_24_P404204_riset1	1.7E-03
60	PEX3	8504	A_23_P259328_riset1	1.7E-03

61	ACVR1	90	A_23_P79218_riset1	1.7E-03
62	CD83	9308	A_23_P70670_riset1	1.8E-03
63	GPR120	338557	A_24_P129588_riset1	1.9E-03
64	FLJ23356	84197	A_23_P83835_riset1	2.0E-03
65	FAM129A	116496	A_24_P233786_riset1	2.1E-03
66	ASPH	444	A_24_P295245_riset1	2.1E-03
67	MCTP1	79772	A_24_P212481_riset1	2.2E-03
68	SORT1	6272	A_24_P325520_riset1	2.2E-03
69	F8	2157	A_24_P314451_riset1	2.2E-03
70	TMEM49	81671	A_32_P9753_riset1	2.4E-03
71	MBOAT2	129642	A_23_P370635_riset1	2.4E-03
72	SORL1	6653	A_23_P87049_riset1	2.4E-03
73	IQGAP1	8826	A_24_P321919_riset1	2.5E-03
74	CLEC6A	93978	MIL_PPPID394307776_riset1	2.6E-03
75	SIRPA	140885	A_24_P267619_riset1	2.6E-03
76	PDHX	8050	A_23_P36266_riset1	2.7E-03
77	STAT3	6774	A_23_P100790_riset1	2.7E-03
78	SLPI	6590	A_23_P91230_riset1	2.7E-03
79	NTHL1	4913	A_23_P88904_riset1	2.8E-03
80	CXCL5	6374	A_24_P277367_riset1	2.8E-03
81	RET	5979	MIL_PPPID397416187_riset1	2.9E-03
82	GPR84	53831	A_23_P25155_riset1	3.0E-03
83	ITK	3702	ITK_riset2	3.0E-03
84	AIM2	9447	A_32_P44394_riset1	3.1E-03
85	NCOA1	8648	NCOA1_riset2_piqor	3.2E-03
86	LOC145474	145474	A_32_P393377_riset1	3.2E-03
87	TNFAIP8	25816	TNFAIP8_riset2	3.3E-03
88	ENOX2	10495	MIL_PPPID394307984_riset1	3.3E-03
89	FSTL3	10272	A_23_P209167_riset1	3.3E-03
90	FAM13A1	10144	A_23_P370651_riset1	3.4E-03
91	KCNJ2	3759	A_23_P329261_riset1	3.4E-03
92	BNIP3	664	A_23_P138635_riset1	3.4E-03
93	GALNT14	79623	A_23_P67847_riset1	3.4E-03
94	TGDS	23483	A_23_P65217_riset1	3.5E-03
95	VSIG2	23584	A_23_P36018_riset1	3.5E-03

96	DNAJC19	131118	A_23_P121396_riset1	3.5E-03
97	A_23_P126328		A_23_P126328_riset1	3.5E-03
98	PPL	5493	A_23_P106901_riset1	3.5E-03
99	WASF3	10810	A_24_P176079_riset1	3.6E-03
100	THC2380706		A_24_P214556_riset1	3.6E-03
101	C1ORF19	116461	A_23_P104022_riset1	3.7E-03
102	SERPINH1	871	A_23_P75998_riset1	3.8E-03
103	LITAF	9516	A_23_P3532_riset1	3.9E-03
104	FLJ37035	645524	A_24_P59471_riset1	3.9E-03
105	FGF7	2252	A_32_P196029_riset1	4.0E-03
106	SLC25A37	51312	A_32_P197026_riset1	4.1E-03
107	IGF1R	3480	A_23_P417282_riset1	4.3E-03
108	EDG1	1901	A_23_P160117_riset1	4.4E-03
109	NGEF	25791	A_23_P102364_riset1	4.4E-03
110	TNFAIP6	7130	A_23_P165624_riset1	4.4E-03
111	RAX	30062	A_23_P89746_riset1	4.4E-03
112	TMTC3	160418	A_24_P944222_riset1	4.4E-03
113	MNAT1	4331	A_23_P32615_riset1	4.4E-03
114	ZNF181	339318	A_23_P50735_riset1	4.4E-03
115	MYC	4609	MIL_PPPID404158649_riset2	4.5E-03
116	CLEC5A	23601	A_23_P71165_riset1	4.5E-03
117	GPX7	2882	A_23_P73972_riset1	4.6E-03
118	HPN	3249	A_23_P101801_riset1	4.6E-03
119	PPIL3	53938	A_23_P28213_riset1	4.6E-03
120	THUMPD1	55623	A_24_P90878_riset1	4.7E-03
121	MAD2L1	4085	A_23_P92441_riset1	4.7E-03
122	SPTLC2	9517	A_24_P150486_riset1	4.7E-03
123	THAP2	83591	A_24_P350437_riset1	4.7E-03
124	CRYAB	1410	A_24_P206776_riset1	4.9E-03
125	C8ORF60	619426	A_24_P59387_riset1	4.9E-03
126	MXD1	4084	A_23_P408094_riset1	4.9E-03
127	MATK	4145	A_23_P50678_riset1	4.9E-03
128	LYN	4067	A_23_P147431_riset1	5.0E-03
129	LGALS2	3957	LGALS2_riset2	5.0E-03
130	SEPT09	6414	A_32_P344025_riset1	5.0E-03

131	PDCD6	10016	A_23_P218997_riset1	5.1E-03
132	DCLRE1A	9937	A_23_P75038_riset1	5.2E-03
133	IL10RA	3587	A_24_P107303_riset1	5.3E-03
134	MAGEH1	28986	A_23_P34144_riset1	5.5E-03
135	LOC550643	550643	A_24_P867868_riset1	5.6E-03
136	SLC25A37	51312	A_32_P197026_riset1	5.6E-03
137	CARD6	84674	A_23_P41854_riset1	5.6E-03
138	ZFP2	80108	A_23_P133359_riset1	5.6E-03
139	PTMA	5757	A_32_P746413_riset1	5.6E-03
140	BACE2	25825	A_23_P154875_riset1	5.7E-03
141	CHST2	9435	CHST2_riset2_piqor	5.8E-03
142	MUC5AC	4586	MIL_PPPID404158966_riset2	5.8E-03
143	ВСКДНВ	594	A_24_P239664_riset1	5.8E-03
144	MTX2	10651	A_23_P120335_riset1	5.8E-03
145	QSOX1	5768	QSOX1_riset2	5.9E-03
146	PKM2	5315	A_23_P399501_riset1	5.9E-03
147	ITGB1BP1	9270	A_23_P154507_riset1	6.0E-03
148	CD7	924	A_23_P118862_riset1	6.0E-03
149	ACOT2	10965	A_23_P3111_riset1	6.0E-03
150	SEPT03	6414	A_32_P344025_riset1	6.0E-03
151	RTN3	10313	A_23_P76682_riset1	6.1E-03
152	FKBP5	2289	A_24_P38081_riset1	6.1E-03
153	CD40LG	959	A_23_P62220_riset1	6.1E-03
154	AIM1	202	A_23_P70785_riset1	6.1E-03
155	FANK1	92565	A_23_P115785_riset1	6.1E-03
156	DNMT1	1786	A_23_P27490_riset1	6.2E-03
157	AK3L1	205	MIL_PPPID394453462_riset1	6.2E-03
158	RFC4	5984	A_23_P18196_riset1	6.2E-03
159	BTG1	694	A_23_P87560_riset1	6.3E-03
160	SPON1	10418	A_32_P133072_riset1	6.3E-03
161	KCNJ15	3772	A_23_P17655_riset1	6.3E-03
162	ATL3	25923	A_23_P105028_riset1	6.3E-03
163	APH1B	83464	A_23_P205997_riset1	6.3E-03
164	LRRC18	474354	A_24_P321125_riset1	6.3E-03

1			1	1
165	AFF3	3899	A_23_P373464_riset1	6.4E-03
166	MCEE	84693	A_23_P56654_riset1	6.4E-03
167	NLRC4	58484	A_23_P119835_riset1	6.4E-03
168	PLA1A	51365	A_23_P29816_riset1	6.4E-03
169	DTX1	1840	A_24_P290751_riset1	6.5E-03
170	TRIM4	89122	A_23_P500601_riset1	6.5E-03
171	TMEM106B	54664	A_32_P353072_riset1	6.6E-03
172	CCNG1	900	A_23_P58606_riset1	6.6E-03
173	HP	3240	MIL_PPPID399806176_riset1	6.7E-03
174	TXNDC13	56255	A_23_P166100_riset1	6.7E-03
175	OR2M1P;OR2M2	388762;391194	A_32_P310503_riset1	6.8E-03
176	FCAR	2204	A_24_P348265_riset1	6.8E-03
177	BTG2	7832	A_23_P62901_riset1	6.9E-03
178	VCPIP1	80124	A_32_P74366_riset1	7.0E-03
179	SATB1	6304	SATB1_riset2	7.0E-03
180	PAK1	5058	MIL_PPPID397416203_riset1	7.1E-03
181	PDLIM7	9260	A_24_P41882_riset1	7.1E-03
182	NOTCH2	4853	A_23_P200792_riset1	7.1E-03
183	A_24_P706752		A_24_P648391_riset1	7.1E-03
184	IL23A	51561	A_23_P76078_riset1	7.2E-03
185	DDEF1	50807	A_23_P71526_riset1	7.2E-03
186	GPRC5B	51704	A_23_P324327_riset1	7.3E-03
187	XBP1	7494	A_23_P120845_riset1	7.3E-03
188	SOCS3	9021	A_23_P207058_riset1	7.3E-03
189	SFRS10	6434	A_24_P145911_riset1	7.3E-03
190	TNFSF10	8743	A_23_P121253_riset1	7.3E-03
191	B3GALT6	126792	A_23_P35021_riset1	7.3E-03
192	AQP9	366	A_23_P106362_riset1	7.3E-03
193	ZNF655	79027	A_23_P345081_riset1	7.4E-03
194	UPB1	51733	A_23_P120822_riset1	7.5E-03
195	RNASE2	6036	A_23_P151638_riset1	7.5E-03
196	MAP2K6	5608	A_23_P207445_riset1	7.5E-03
197	CHST2	9435	CHST2_riset2_piqor	7.6E-03
198	LYRM7	90624	A_32_P18159_riset1	7.6E-03

199	AK124263		A_24_P538708_riset1	7.6E-03
200	MYT1;PCMTD2	4661;55251	A_23_P210829_riset1	7.6E-03
201	CD96	10225	A_23_P44154_riset1	7.7E-03
202	IRF2	3660	A_23_P136478_riset1	7.7E-03
203	PCGF6	84108	A_23_P115703_riset1	7.7E-03
204	IGKV3-20	28912	A_23_P21800_riset1	7.7E-03
205	CARD11	84433	A_23_P82324_riset1	7.8E-03
206	IFT80	57560	A_23_P316150_riset1	7.8E-03
207	SLAMF1	6504	SLAMF1_riset2	7.9E-03
208	SIP1	8487	A_23_P88194_riset1	8.0E-03
209	FAIM	55179	A_23_P253932_riset1	8.0E-03
210	NEK1	4750	A_23_P124427_riset1	8.0E-03
211	IL1R2	7850	A_23_P79398_riset1	8.0E-03
212	HOXB2	3212	A_23_P107283_riset1	8.1E-03
213	VCAN	1462	VCAN_riset2	8.2E-03
214	FLT3	2322	MIL_PPPID394308044_riset1	8.2E-03
215	CD55	1604	A_23_P374862_riset1	8.2E-03
216	SLC26A8	116369	A_23_P30950_riset1	8.2E-03
217	PDLIM1	9124	A_23_P149992_riset1	8.3E-03
218	ZMYM1	79830	A_24_P53985_riset1	8.3E-03
219	FCGR1A	2209	A_23_P63395_riset1	8.3E-03
220	LGALS8	3964	LGALS8_riset2	8.3E-03
221	MRPS30	10884	A_23_P252362_riset1	8.4E-03
222	CLIC3	9022	A_23_P254654_riset1	8.4E-03
223	BEX4	56271	A_23_P114391_riset1	8.4E-03
224	SLC11A1	6556	A_32_P436132_riset1	8.4E-03
225	BMP2K	55589	A_24_P86240_riset1	8.4E-03
226	SFT2D3	84826	A_23_P5566_riset1	8.4E-03
227	C5ORF28	64417	A_23_P121875_riset1	8.5E-03
228	STX11	8676	A_23_P156788_riset1	8.5E-03

229	ITGA1	3672	A_23_P256332_riset1	8.6E-03
230	PHLDB2	90102	A_24_P240166_riset1	8.6E-03
231	A_23_P399604		A_23_P399604_riset1	8.7E-03
232	GTL3	29105	A_23_P3514_riset1	8.9E-03
233	ITSN2	50618	MIL_PPPID399200362_riset1	8.9E-03
234	ARHGEF12	23365	A_24_P175783_riset1	8.9E-03
235	LOC100131941	100131941	MIL_PPPID400032845_riset1	8.9E-03
236	MUC8	0	MUC8_riset2_piqor	8.9E-03
237	ORM2	5005	A_23_P9485_riset1	9.0E-03
238	FLJ22662	79887	A_23_P87709_riset1	9.1E-03
239	APEX1	328	A_23_P151649_riset1	9.1E-03
240	RPS4Y1	6192	A_23_P259314_riset1	9.2E-03
241	LCK	3932	LCK_riset2	9.3E-03
242	LOC642897	642897	A_24_P84401_riset1	9.5E-03
243	MCL1	4170	A_24_P336754_riset1	9.5E-03
244	SLC26A8	116369	A_23_P30950_riset1	9.5E-03
245	PSMB3	5691	PSMB3_riset2_piqor	9.5E-03
246	CD247	919	A_23_P34676_riset1	9.6E-03
247	UPF3A	65110	A_32_P202778_riset1	9.6E-03
248	RGS1	5996	A_23_P97141_riset1	9.6E-03
249	RBM3	5935	RBM3_riset2	9.6E-03
250	POLR3H	171568	A_24_P322847_riset1	9.8E-03
251	RHOH	399	A_23_P58132_riset1	9.8E-03
252	SELL	6402	A_23_P114921_riset1	9.8E-03
253	RAC2	5880	A_23_P218774_riset1	9.8E-03
254	LETMD1	25875	A_23_P117037_riset1	9.9E-03
255	THC2286599		A_32_P106807_riset1	9.9E-03
256	PIAS1	8554	PIAS1_riset2_piqor	9.9E-03
257	LDHB	3945	A_23_P53476_riset1	9.9E-03
258	CDKN1B	1027	A_23_P204696_riset2	1.0E-02
259	TRA@	6955	A_23_P258504_riset1	1.0E-02

260 NRL 4901 A\_23\_P337746\_riset1 1.0E-02

## Supplemental Table 3B. List of probes within the *training* and *test sets* with significant differential expression identified by four-class analysis of microarray data.

Complete list of 260 probes within (A) *training set* and 1378 probes within (B) *test set* with significant differential expression identified following four-class analysis, listed in order of ranked significance, with corresponding microarray probe ID and EntrezGene ID (where assigned). Probes were ranked on p values by Kruskal-Wallis test with adjustment for False Discovery Rate (FDR) at 1%.

	Test set			
Rank	Gene Name	EntrezGene ID	Probe ID	P
1	TCL1A	8115	A_23_P357717_riset1	6.09E-10
2	TCL1A	8115	MIL_PPPID394307780_riset1	6.09E-10
3	HS3ST1	9957	A_23_P121657_riset1	1.45E-09
4	CD200	4345	A_23_P121480_riset1	3.42E-09
5	ADAMTS4	9507	A_23_P360754_riset1	1.84E-08
6	CTLA4	1493	A_23_P102481_riset1	6.14E-08
7	GPR44	11251	GPR44_riset2	7.93E-08
8	TBC1D4	9882	A_23_P88095_riset1	1.11E-07
9	PCDH9	5101	A_24_P187218_riset1	1.17E-07
10	THC2317432	-	A_32_P124728_riset1	1.21E-07
11	IGKV3-20	28912	A_23_P21800_riset1	1.43E-07
12	CD79B	974	A_23_P207201_riset1	1.51E-07
13	IGHM	3507	A_24_P417352_riset1	1.54E-07
14	MGC29506	51237	A_23_P84596_riset1	1.55E-07
15	IGKC	3514	MIL_PPPID399806182_riset1	1.56E-07
16	CD247	919	A_23_P34676_riset1	1.64E-07
17	BTG1	694	A_23_P87560_riset1	1.73E-07
18	LOC10013294 1	100132941	A_24_P144346_riset1	1.77E-07
19	MCTP1	79772	A_24_P212481_riset1	1.79E-07
20	BLNK	29760	A_24_P64344_riset1	2.11E-07
21	LOC652494	652494	A_24_P100684_riset1	2.57E-07
22	RGS1	5996	A_23_P97141_riset1	3.12E-07
23	AY062331	-	A_24_P639701_riset1	3.33E-07
24	ICOS	29851	MIL_PPPID399200278_riset1	3.39E-07

25	CR613436	-	A_32_P27135_riset1	3.60E-07
26	IGJ	3512	A_23_P167168_riset1	3.85E-07
27	BMP2K	55589	A_24_P86240_riset1	4.73E-07
28	BTLA	151888	MIL_PPPID399200354_riset1	5.13E-07
29	CD79A	973	CD79A_riset2_piqor	5.47E-07
30	OCIAD2	132299	A_23_P121702_riset1	5.53E-07
31	FHIT	2272	FHIT_riset2	5.96E-07
32	ENST0000035 9488	-	A_23_P21260_riset1	6.17E-07
33	IRF8	3394	A_23_P129636_riset1	6.32E-07
34	ENST0000036 0623	-	A_24_P24053_riset1	7.85E-07
35	RPS6	6194	A_23_P123563_riset1	8.23E-07
36	SORT1	6272	A_24_P325520_riset1	8.33E-07
37	KIAA0485		A_24_P762886_riset1	8.52E-07
38	ASB2	51676	A_23_P205370_riset1	8.58E-07
39	RPL9	6133	A_32_P153100_riset1	8.58E-07
40	BBS4	585	A_23_P99967_riset1	8.63E-07
41	EIF2AK3	9451	A_23_P135857_riset1	8.74E-07
42	CD48	962	A_23_P74145_riset1	9.45E-07
43	FCRL2	79368	A_23_P160751_riset1	9.83E-07
44	DENND2D	79961	A_23_P85952_riset1	9.87E-07
45	IGLL3	91353	IGLL3_riset2	1.06E-06
46	PMP22	5376	A_23_P100711_riset1	1.16E-06
47	HINT1	3094	A_23_P252832_riset1	1.25E-06
48	FANK1	92565	A_23_P115785_riset1	1.31E-06
49	RHOH	399	A_23_P58132_riset1	1.46E-06
50	IGLC	3536	MIL_PPPID399806199_riset1	1.51E-06
51	ATL3	25923	A_23_P105028_riset1	1.59E-06
52	FCRL1	115350	A_32_P71876_riset1	1.84E-06
53	PNOC	5368	A_23_P253321_riset1	1.87E-06
54	LOC10013132 3	100131323	A_24_P93452_riset1	2.05E-06
55	IGHG1;IGHG 2;IGHG3;IGH G4	3500;3501;3502;3503	MIL_PPPID399806233_riset1	2.17E-06
56	FCRLA	84824	A_23_P46037_riset1	2.18E-06
57	MS4A1	931	MIL_PPPID394453510_riset1	2.21E-06

58	TMEM49	81671	A_32_P9753_riset1	2.22E-06
59	BCL7A	605	A_24_P203056_riset1	2.45E-06
60	PLXDC2	84898	A_32_P187518_rev_riset1	2.47E-06
61	CD28	940	A_23_P91095_riset1	2.50E-06
62	SLAMF1	6504	SLAMF1_riset2	2.50E-06
63	DNASE1L3	1776	A_23_P257993_riset1	2.53E-06
64	FN1	2335	A_24_P119745_riset1	2.54E-06
65	LHFPL2	10184	A_23_P255104_riset1	2.79E-06
66	SPTLC2	9517	A_24_P150486_riset1	2.85E-06
67	IKZF2	22807	A_32_P114284_riset1	3.13E-06
68	DPP4	1803	A_23_P39885_riset1	3.17E-06
69	KLRB1	3820	A_32_P807121_riset1	3.21E-06
70	IL2RA	3559	A_23_P127288_riset1	3.37E-06
71	SPTA1	6708	A_23_P63158_riset1	3.47E-06
72	AK129547	-	A_32_P194372_riset1	3.52E-06
73	FCER2	2208	A_23_P164773_riset1	3.59E-06
74	HLA-DOA	3111	A_32_P356316_riset1	3.67E-06
75	SWAP70	23075	A_23_P116533_riset1	3.71E-06
76	PLEKHA1	59338	A_23_P115792_riset1	3.82E-06
77	LDHB	3945	A_23_P53476_riset1	3.89E-06
78	TGDS	23483	A_23_P65217_riset1	3.99E-06
79	RPS27	6232	A_23_P74629_riset1	4.07E-06
80	TSPAN3	10099	A_23_P14804_riset1	4.08E-06
81	IGLL1	3543	A_24_P83102_riset1	4.20E-06
82	EBI2	1880	A_23_P25566_riset1	4.39E-06
83	SORT1	6272	A_24_P325520_riset1	4.69E-06
84	LAT	27040	A_23_P44105_riset1	4.78E-06
85	BNIP3	664	A_23_P138635_riset1	4.84E-06
86	MGC24039	160518	A_23_P379746_riset1	4.85E-06
87	RFC4	5984	A_23_P18196_riset1	5.05E-06
88	NEDD4L	23327	A_23_P387856_riset1	5.10E-06
89	ABLIM1	3983	A_23_P202520_riset1	5.11E-06
90	QRSL1	55278	A_24_P63799_riset1	5.45E-06
91	MAOA	4128	A_23_P96410_riset1	5.65E-06
92	LOC643837	643837	A_32_P196036_riset1	5.70E-06

93	TNCRNA	283131	A_32_P1036_riset1	5.91E-06
94	MAPK14	1432	MAPK14_1_riset2	6.02E-06
95	CCR7	1236	A_23_P343398_riset1	6.50E-06
96	LOC729349	729141	A_24_P161233_riset1	6.64E-06
97	TLR5	7100	A_23_P85903_riset1	6.68E-06
98	MAGEH1	28986	A_23_P34144_riset1	6.78E-06
99	ITK	3702	ITK_riset2	6.93E-06
100	GADD45A	1647	A_23_P23221_riset1	7.11E-06
101	FZD5	7855	A_24_P148503_riset1	7.35E-06
102	EBF1	1879	A_24_P156501_riset1	7.39E-06
103	SPON1	10418	A_32_P133072_riset1	7.60E-06
104	RPS21	6227	A_23_P120660_riset1	7.61E-06
105	EBF1	1879	A_24_P156501_riset1	8.13E-06
106	AKR1C3	8644	A_23_P138543_riset1	8.53E-06
107	OLIG2	10215	A_23_P211079_riset1	8.60E-06
108	RPA3	6119	A_23_P256455_riset1	8.61E-06
109	EDG1	1901	A_23_P160117_riset1	9.65E-06
110	MBOAT2	129642	A_23_P370635_riset1	9.71E-06
111	BLK	640	BLK_riset2	9.78E-06
112	KCNJ2	3759	A_23_P329261_riset1	1.01E-05
113	FOXO3	2309	A_32_P493575_riset1	1.03E-05
114	HSF2	3298	A_32_P9963_riset1	1.04E-05
115	DTX1	1840	A_24_P290751_riset1	1.08E-05
116	RPL30	6156	A_24_P29818_riset1	1.09E-05
117	IL12RB2	3595	IL12RB2_riset2	1.09E-05
118	FLJ36644	400617	A_32_P102966_riset1	1.14E-05
119	SLC25A37	51312	A_32_P197026_riset1	1.21E-05
120	CD19	930	CD19_riset2	1.26E-05
121	CD22	933	CD22_riset2	1.26E-05
122	EP400	57634	A_23_P253154_riset1	1.26E-05
123	CD83	9308	A_23_P70670_riset1	1.31E-05
124	IRAK3	11213	IRAK3_riset2	1.34E-05
125	GPR84	53831	A_23_P25155_riset1	1.39E-05
126	GATM	2628	A_23_P129064_riset1	1.41E-05
127	THC2280867	-	A_32_P122715_riset1	1.45E-05

128	HLA-DOB	3112	A_23_P30736_riset1	1.49E-05
129	ABCD1	215	A_23_P148556_riset1	1.51E-05
130	UVRAG	7405	UVRAG_riset2	1.54E-05
131	PPIL3	53938	A_23_P28213_riset1	1.54E-05
132	TNFAIP8	25816	TNFAIP8_riset2	1.54E-05
133	OLFM4	10562	A_24_P181254_riset1	1.55E-05
134	BAG1	573	BAG1_riset2_piqor	1.55E-05
135	CXORF21	80231	A_23_P62227_riset1	1.66E-05
136	PIK3IP1	113791	A_24_P134488_riset1	1.66E-05
137	LETMD1	25875	A_23_P117037_riset1	1.68E-05
138	ZBED5	58486	A_23_P98483_riset1	1.69E-05
139	TIMP2;LOC7 32206	7077	MIL_PPPID397416231_riset1	1.69E-05
140	EEF1A1;EEF 1AL7	1915;441032	MIL_PPPID399806198_riset1	1.71E-05
141	NUBPL	80224	A_23_P170906_riset1	1.72E-05
142	HOXB2	3212	A_23_P107283_riset1	1.73E-05
143	PTPRF	5792	A_32_P416233_riset1	1.90E-05
144	NELL2	4753	A_23_P10025_riset1	2.00E-05
145	LCN2	3934	A_23_P169437_riset1	2.04E-05
146	TCF4	6925	TCF4_riset2	2.04E-05
147	MARCKSL1	65108	A_23_P310_riset1	2.12E-05
148	PSMA1	5682	MIL_PPPID402610840_riset2	2.12E-05
149	TCF7	6932	A_23_P7582_riset1	2.22E-05
150	HLX	3142	A_23_P126263_riset1	2.35E-05
151	EGR1	1958	A_23_P214080_riset1	2.38E-05
152	IL23A	51561	A_23_P76078_riset1	2.41E-05
153	AF471475	-	A_23_P259763_riset1	2.55E-05
154	CCR4	1233	A_23_P72989_riset1	2.58E-05
155	HNRPH1	3187	A_24_P320254_riset1	2.60E-05
156	HCG_198446 8;LOC388524 ;RPSA	388524;389672;3921	MIL_PPPID399806188_riset1	2.69E-05
157	MT1E	4493	MIL_PPPID399806219_riset1	2.76E-05
158	CCL23	6368	A_24_P133905_riset1	2.78E-05
159	PSCD1	9267	A_23_P83781_riset1	2.80E-05
160	CTSD	1509	A_23_P52556_riset1	2.84E-05

161	SLC26A8	116369	A_23_P30950_riset1	2.86E-05
162	PDLIM7	9260	A_24_P41882_riset1	2.88E-05
163	CASD1	64921	A_24_P69379_riset1	2.89E-05
164	BEX5	340542	A_32_P69849_riset1	2.94E-05
165	ENST0000032 2032	-	A_23_P61042_riset1	2.95E-05
166	SLC29A1	2030	A_23_P133694_riset1	2.98E-05
167	HSPE1	3336	A_23_P56922_riset1	3.00E-05
168	KLRB1	3820	A_32_P807121_riset1	3.04E-05
169	SLC41A1	254428	A_24_P122732_riset1	3.12E-05
170	FZD5	7855	A_24_P148503_riset1	3.46E-05
171	AK094477	-	A_24_P213622_riset1	3.46E-05
172	ETAA1	54465	A_23_P51117_riset1	3.56E-05
173	CA433167	-	A_32_P101002_riset1	3.64E-05
174	STAG3	10734	A_23_P145657_riset1	3.66E-05
175	C6ORF105	84830	A_23_P156826_riset1	3.76E-05
176	BEX4	56271	A_23_P114391_riset1	3.84E-05
177	PPWD1	23398	A_23_P110433_riset1	3.93E-05
178	RNASE2	6036	A_23_P151638_riset1	4.22E-05
179	INHBA	3624	A_23_P122924_riset1	4.32E-05
180	SPRY1	10252	A_23_P144476_riset1	4.48E-05
181	THC2349739	-	A_32_P26422_riset1	4.55E-05
182	RECK	8434	A_23_P83028_riset1	4.56E-05
183	ARID5B	84159	A_32_P18440_riset1	4.82E-05
184	RPS27A	6233	MIL_PPPID397416175_riset1	4.96E-05
185	ATXN3	4287	A_23_P129031_riset1	4.96E-05
186	ELA2	1991	A_23_P130961_riset1	5.10E-05
187	DENND1A	57706	A_32_P23854_riset1	5.12E-05
188	CELSR1	9620	A_32_P157471_rev_riset1	5.13E-05
189	DDC	1644	A_23_P145644_riset1	5.18E-05
190	RPL35;LOC3 90876;LOC44 0737;HCG_19 83332	390876	A_24_P187023_riset1	5.20E-05
191	MAN1A1	4121	A_23_P156425_riset1	5.31E-05
192	COL17A1	1308	A_23_P52323_riset1	5.31E-05
193	HSPA8	3312	A_32_P13728_riset1	5.31E-05

194	CXCL9	4283	CXCL9_riset2_piqor	5.37E-05
195	FADS3	3995	A_23_P64399_riset1	5.38E-05
196	PDHX	8050	A_23_P36266_riset1	5.40E-05
197	C12ORF57	113246	A_23_P350551_riset1	5.64E-05
198	NFAM1	150372	A_23_P17911_riset1	5.69E-05
199	OXCT1	5019	A_32_P63848_riset1	5.71E-05
200	F7	2155	A_32_P719148_riset1	5.97E-05
201	HRH4	59340	A_23_P386310_riset1	5.98E-05
202	TNKS	8658	A_32_P144596_riset1	5.99E-05
203	CD52	1043	A_23_P85800_riset1	6.02E-05
204	CD2	914	A_23_P161076_riset1	6.05E-05
205	CD40	958	A_23_P57036_riset1	6.10E-05
206	TCF3	6929	A_24_P365365_riset1	6.10E-05
207	LCK	3932	LCK_riset2	6.13E-05
208	PFKFB3	5209	A_24_P261259_riset1	6.32E-05
209	SFRS10	6434	A_24_P145911_riset1	6.37E-05
210	NMD3	51068	A_23_P32861_riset1	6.46E-05
211	MEFV	4210	A_23_P140967_riset1	6.48E-05
212	LIMA1	51474	A_23_P151267_riset1	6.56E-05
213	GZMK	3003	A_23_P156216_riset1	6.61E-05
214	ASPH	444	A_24_P295245_riset1	6.61E-05
215	MS4A6A	64231	A_23_P203376_riset1	6.85E-05
216	FLJ14186;LO C388312;LOC 388572;LOC4 41124;LOC64 2788;LOC646 301;LOC6464 34;LOC65305 6;LOC728100 ;LOC728417; LOC728728;L OC728790;LO C729021;LOC 729028;LOC7 29737;LOC73 0953;LOC731 275	388312;388572;4011 49;441124;642788;64 6301;646434;653056; 728100;728417;7287 28;728790;729021;72 9028;729737;730953; 731275	A_32_P28158_riset1	6.90E-05
217	CCDC18	343099	A_23_P51805_riset1	7.04E-05
218	AIM2	9447	A_32_P44394_riset1	7.32E-05
219	LOC440731	440731	A_32_P212373_riset1	7.41E-05

i	1 1		1	
220	AKR1B1	231	MIL_PPPID394308032_riset1	7.54E-05
221	THC2393621	-	A_32_P165753_riset1	7.54E-05
222	PTHR1	5745	A_23_P167027_riset1	7.59E-05
223	ZNF14	7561	A_23_P101811_riset1	7.67E-05
224	ERG	2078	A_23_P57323_riset1	7.72E-05
225	IRF4	3662	A_23_P214361_riset1	7.72E-05
226	TANK	10010	TANK_riset2	7.85E-05
227	TRIM4	89122	A_23_P500601_riset1	7.85E-05
228	AMFR	267	A_23_P141005_riset1	7.89E-05
229	HLTF	6596	A_24_P277155_riset1	7.89E-05
230	CD6	923	A_23_P311875_riset1	8.02E-05
231	ANXA3	306	A_23_P121716_riset1	8.27E-05
232	C6ORF108	10591	A_23_P167951_riset1	8.27E-05
233	CLC	1178	A_23_P101683_riset1	8.31E-05
234	AUTS2	26053	A_32_P809435_riset1	8.35E-05
235	ZNF549	256051	A_23_P399146_riset1	8.47E-05
236	TKTL1	8277	A_23_P259901_riset1	8.47E-05
237	NR3C2	4306	A_23_P392470_riset2	8.51E-05
238	MAOB	4129	A_23_P85008_riset1	8.59E-05
239	IL28RA	163702	IL28RA_riset2	8.71E-05
240	DNMT1	1786	A_23_P27490_riset1	8.75E-05
241	FCAR	2204	A_24_P348265_riset1	8.95E-05
242	PLEKHG1	57480	A_24_P6517_riset1	8.99E-05
243	A_24_P91025 5	-	A_24_P910255_riset1	9.21E-05
244	ZAK	51776	A_23_P318300_riset1	9.40E-05
245	IL4	3565	A_23_P213706_riset1	9.40E-05
246	RTTN	25914	A_24_P108301_riset1	9.66E-05
247	STMN1	3925	A_23_P200866_riset1	9.69E-05
248	SEPT09	6414	A_32_P344025_riset1	9.76E-05
249	A_23_P39349 5	-	A_23_P393495_riset1	9.76E-05
250	DYSF	8291	A_23_P39925_riset1	9.80E-05
251	BCL11A	53335	A_24_P402588_riset1	9.80E-05

252	FLJ14186;LO C441124;LOC 646434;LOC6 53056;LOC72 8417;LOC728 728;LOC7290 21;LOC72902 8;LOC730953 ;LOC731275	388312;388572;4011 49;441124;642788;64 6301;646434;653056; 728100;728417;7287 28;728790;729021;72 9028;729737;730953; 731275	A_32_P28158_riset1	9.87E-05
253	RASGRP1	10125	A_23_P124642_riset1	9.87E-05
254	PPP3CC	5533	PPP3CC_riset2	9.90E-05
255	EIF2C4	192670	A_23_P23171_riset1	9.90E-05
256	MTX3	345778	MIL_PPPID394307960_riset1	9.94E-05
257	DDEF1IT1	29065	A_24_P360499_riset1	9.97E-05
258	LOC10012912 2	100129122	A_32_P231493_riset1	1.01E-04
259	PDE2A	5138	A_23_P401106_riset1	1.05E-04
260	ITGAM	3684	A_23_P124108_riset1	1.06E-04
261	MIZF	25988	A_23_P13176_riset1	1.07E-04
262	SET	6418	MIL_PPPID400032825_riset1	1.07E-04
263	RBBP9	10741	A_23_P257532_riset1	1.10E-04
264	SLC26A8	116369	A_23_P30950_riset1	1.11E-04
265	A_24_P11048 7	-	A_24_P110487_riset1	1.12E-04
266	IL10RA	3587	A_24_P107303_riset1	1.12E-04
267	FLJ22662	79887	A_23_P87709_riset1	1.15E-04
268	SPI1	6688	A_23_P115998_riset1	1.15E-04
269	THC2296737	-	A_24_P698128_riset1	1.15E-04
270	LMNA	4000	A_24_P162718_riset1	1.15E-04
271	FCER1A	2205	A_23_P103765_riset1	1.16E-04
272	GCLM	2730	A_23_P103996_riset1	1.17E-04
273	INTS10	55174	A_23_P157607_riset1	1.18E-04
274	GPX7	2882	A_23_P73972_riset1	1.18E-04
275	CD40LG	959	A_23_P62220_riset1	1.19E-04
276	TACSTD2	4070	A_23_P149529_riset1	1.19E-04
277	KLF7	8609	A_23_P67980_riset1	1.20E-04
278	THC2317292		A_32_P5148_riset1	1.20E-04
279	FCER1G	2207	A_24_P679984_riset1	1.23E-04
280	SNHG5	387066	A_23_P361085_riset1	1.23E-04
281	CTSF	8722	A_23_P24433_riset1	1.24E-04

282	UPF3A	65110	A_32_P202778_riset1	1.24E-04
283	CD81	975	A_23_P13423_riset1	1.25E-04
284	CCDC88A	55704	A_24_P20120_riset1	1.27E-04
285	DAD1	1603	A_24_P47870_riset1	1.27E-04
286	EIF3E	3646	A_24_P206427_riset1	1.27E-04
287	RPL14	9045	A_23_P18294_riset1	1.29E-04
288	HS3ST3B1	9953	A_24_P23625_riset1	1.30E-04
289	ANKFY1	51479	A_24_P151834_riset1	1.30E-04
290	LYPD1	116372	A_32_P101031_riset1	1.30E-04
291	DSE	29940	A_23_P19226_riset1	1.31E-04
292	CD3D	915	MIL_PPPID394307868_riset1	1.32E-04
293	TMEM106B	54664	A_32_P353072_riset1	1.34E-04
294	CYFIP2	26999	A_23_P167509_riset1	1.35E-04
295	LIN7A	8825	A_23_P99253_riset1	1.36E-04
296	ANK3	288	A_32_P33304_riset1	1.37E-04
297	RPL23	9349	A_23_P26713_riset1	1.39E-04
298	PTPLAD1;LO C732402	51495;732402	A_23_P99927_riset1	1.40E-04
299	LYCAT	253558	A_32_P92505_riset1	1.40E-04
300	MAD2L1	4085	A_23_P92441_riset1	1.41E-04
301	FCRL5	83416	A_23_P201211_riset1	1.41E-04
302	PITPNM1	9600	PITPNM1_riset2	1.43E-04
303	C1QB	713	A_23_P137366_riset1	1.43E-04
304	RPL15	6138	A_23_P253200_riset1	1.43E-04
305	DDR1	780	A_24_P123601_riset1	1.48E-04
306	SERPINA1	5265	A_23_P218111_riset1	1.59E-04
307	COX6A1	1337	COX6A1_riset2	1.60E-04
308	RASGRP4	115727	A_23_P431310_riset1	1.60E-04
309	PCTK1	5127	A_24_P233663_riset1	1.67E-04
310	THAP2	83591	A_24_P350437_riset1	1.74E-04
311	CTSB	1508	MIL_PPPID394453458_riset1	1.78E-04
312	TRA@	6955	A_23_P258504_riset1	1.78E-04
313	ATP8A2	51761	A_23_P258612_riset1	1.81E-04
314	UBE2T	29089	A_23_P115482_riset1	1.81E-04
315	LTF	4057	MIL_PPPID397416163_riset1	1.81E-04
316	AKAP2	11217;445815	AKAP2_riset2	1.83E-04

317	THUMPD1	55623	A_24_P90878_riset1	1.86E-04
318	FCGR1A	2209	A_23_P63395_riset1	1.89E-04
319	RETN	56729	A_23_P119222_riset1	1.92E-04
320	NUDCD2	134492	A_23_P360245_riset1	1.93E-04
321	LOC645638	645638	A_24_P691826_riset1	1.94E-04
322	PTPRCAP	5790	A_23_P98173_riset1	1.96E-04
323	C14ORF106	55320	A_23_P106162_riset1	1.97E-04
324	AF314543	-	A_24_P196307_riset1	1.99E-04
325	A_24_P85018	-	A_24_P850187_riset1	2.01E-04
326	CHIT1	1118	A_23_P126278_riset1	2.01E-04
327	PDE8B	8622	A_24_P197537_riset1	2.01E-04
328	HSPA9	3313	A_23_P213973_riset1	2.02E-04
329	SH2D1B	117157	A_32_P324533_riset1	2.02E-04
330	MEF2A	4205	A_24_P1731_riset1	2.04E-04
331	TMTC3	160418	A_24_P944222_riset1	2.04E-04
332	MIRN155	114614	A_32_P108156_riset1	2.07E-04
333	GALNT14	79623	A_23_P67847_riset1	2.10E-04
334	PPIA	5478	MIL_PPPID404158893_riset2	2.10E-04
335	BCKDHB	594	A_24_P239664_riset1	2.12E-04
336	SFRS2	6427	A_23_P77776_riset1	2.12E-04
337	GALNT4	8693	A_24_P942370_riset1	2.12E-04
338	SATB1	6304	SATB1_riset2	2.13E-04
339	PRKCE	5581	A_23_P250564_riset1	2.14E-04
340	ZNF17	7565	A_32_P401723_riset1	2.16E-04
341	PRIM1	5557	A_23_P25019_riset1	2.16E-04
342	PRKCH	5583	PRKCH_riset2	2.17E-04
343	MAP3K7IP3	257397	A_23_P305033_riset1	2.18E-04
344	FAU	2197	A_23_P127438_riset1	2.19E-04
345	FLT3	2322	MIL_PPPID394308044_riset1	2.20E-04
346	PLCL2	23228	A_23_P80594_riset1	2.22E-04
347	HSPD1	3329	A_32_P25273_riset2	2.24E-04
348	ACTN4	81	A_23_P101655_riset1	2.25E-04
349	TXNDC9	10190	A_23_P154330_riset1	2.27E-04
350	THC2432515	-	A_32_P184268_riset1	2.29E-04
351	ZWILCH	55055	A_32_P129306_riset1	2.32E-04

352	SH2D1B	117157	A_32_P324533_riset1	2.32E-04
353	CAMP	820	A_23_P253791_riset1	2.34E-04
354	TUBB;TUBB 2A	203068;7280	A_23_P19291_riset1	2.34E-04
355	AKAP1	8165	AKAP1_riset2	2.35E-04
356	DTNBP1	84062	A_24_P145316_riset1	2.36E-04
357	ADD3	120	A_24_P90097_riset1	2.36E-04
358	ZNF573	126231	A_23_P339079_riset1	2.38E-04
359	CHST2	9435	CHST2_riset2_piqor	2.41E-04
360	ARG1	383	A_23_P111321_riset1	2.44E-04
361	SSFA2	6744	A_24_P924040_riset1	2.52E-04
362	DHX9	1660	A_23_P97749_riset1	2.54E-04
363	UBE2CBP	90025	A_24_P626931_riset1	2.56E-04
364	DEFA4	1669	A_23_P326080_riset1	2.58E-04
365	HLA-DRA	3122	A_32_P87697_riset1	2.64E-04
366	DNTT	1791	DNTT_riset2	2.65E-04
367	ZDHHC3	51304	A_24_P342880_riset1	2.68E-04
368	RHBDD1	84236	A_24_P134834_riset1	2.69E-04
369	IL7R	3575	A_23_P404494_riset1	2.69E-04
370	SFT2D3	84826	A_23_P5566_riset1	2.72E-04
371	KLRG1	10219	A_23_P64898_riset1	2.75E-04
372	MSR1	4481	MIL_PPPID397416287_riset1	2.77E-04
373	ABI2	10152	A_24_P933418_riset1	2.77E-04
374	NDFIP2	54602	A_24_P264909_riset1	2.78E-04
375	IFT80	57560	A_23_P316150_riset1	2.79E-04
376	BST1	683	A_23_P7325_riset1	2.80E-04
377	HLA-DQA2	3118	A_23_P42302_riset1	2.81E-04
378	VSTM3	201633	A_23_P80528_riset1	2.86E-04
379	CCDC123	84902	A_24_P145229_riset1	2.89E-04
380	AMIGO1	57463	A_24_P302506_riset1	2.93E-04
381	NDUFB5	4711	A_23_P57848_riset1	2.96E-04
382	PIP4K2A	5305	A_23_P104344_riset1	2.97E-04
383	BZRAP1	9256	A_24_P113131_riset1	3.01E-04
384	FURIN	5045	A_23_P3361_riset1	3.06E-04
385	GNG7	2788	A_32_P136295_riset1	3.08E-04
386	DOK3	79930	A_23_P133506_riset1	3.09E-04

387	KIAA0888	26049	A_23_P423074_riset1	3.11E-04
388	DHRS12	79758	A_23_P205200_riset1	3.15E-04
389	SLPI	6590	A_23_P91230_riset1	3.23E-04
390	GLDC	2731	A_23_P123596_riset1	3.25E-04
391	RSL1D1	26156	A_24_P778836_riset1	3.35E-04
392	PTMA	5757	A_32_P746413_riset1	3.38E-04
393	CDK4	1019	A_23_P24997_riset1	3.40E-04
394	BC033983	-	A_24_P810084_riset1	3.44E-04
395	STAT4	6775	STAT4_riset2_piqor	3.49E-04
396	FAT	2195	A_32_P368940_riset1	3.58E-04
397	ZNF264	9422	MIL_PPPID394453377_riset1	3.62E-04
398	PILRB	29990	A_23_P19829_riset1	3.62E-04
399	EVI2B	2124	A_23_P66694_riset1	3.63E-04
400	C5ORF28	64417	A_23_P121875_riset1	3.68E-04
401	A_23_P39960 4	-	A_23_P399604_riset1	3.73E-04
402	FAM108A1;F AM108A2;FA M108A3	653401;728917;8192	MIL_PPPID399806187_riset1	3.82E-04
403	RHOBTB3	22836	A_23_P92710_riset1	3.83E-04
404	PLCG1	5335	MIL_PPPID397416315_riset1	3.86E-04
405	SLC7A8	23428	A_23_P205489_riset1	3.90E-04
406	PPARA	5465	A_24_P570049_riset1	3.90E-04
407	PBX1	5087	A_23_P62948_riset1	3.93E-04
408	RPS27L	51065	A_23_P14734_riset1	3.95E-04
409	C8ORF60	619426	A_24_P59387_riset1	4.02E-04
410	OLAH	55301	A_23_P161458_riset1	4.04E-04
411	MKI67IP	84365	A_23_P50897_riset1	4.08E-04
412	C16ORF63	123811	A_23_P390744_riset1	4.09E-04
413	PEX3	8504	A_23_P259328_riset1	4.12E-04
414	FLJ21272	80100	A_23_P11922_riset1	4.15E-04
415	TOP2B	7155	A_23_P121095_riset1	4.15E-04
416	ICAM2	3384	A_23_P152655_riset1	4.25E-04
417	WWP2	11060	WWP2_1_riset2	4.27E-04
418	SMAD3	4088	A_23_P48936_riset1	4.29E-04
419	QRSL1	55278	A_24_P63799_riset1	4.31E-04
420	APOB48R	55911	A_23_P54770_riset1	4.37E-04

421	TNRC8	57690	A_23_P15765_riset1	4.37E-04
422	SLC39A8	64116	A_23_P41424_riset1	4.37E-04
423	MAPK14	1432	MAPK14_1_riset2	4.38E-04
424	EFCAB2	84288	A_23_P149476_riset1	4.45E-04
425	PRKCD	5580	PRKCD_riset2	4.46E-04
426	WDR21A	26094	A_23_P370035_riset1	4.47E-04
427	DBI	1622	A_23_P79199_riset1	4.48E-04
428	B3GNT5	84002	A_23_P18372_riset1	4.50E-04
429	C5ORF39	389289	A_23_P431591_riset1	4.56E-04
430	EMR4	326342	MIL_PPPID399200170_riset1	4.57E-04
431	ASF1A	25842	MIL_PPPID394307924_riset1	4.62E-04
432	FLJ36840	645524	A_24_P59471_riset1	4.63E-04
433	PDCD6	10016	A_23_P218997_riset1	4.64E-04
434	SRXN1	140809	A_23_P320113_riset1	4.67E-04
435	RP2	6102	A_23_P22433_riset1	4.71E-04
436	C1QBP	708	A_23_P370434_riset1	4.72E-04
437	FLJ32866	731424	MIL_PPPID400032869_riset1	4.73E-04
438	CCRL2;LOC7 27811	727811;9034	A_24_P97405_riset1	4.73E-04
439	RHCE;RHD	6006;6007	MIL_PPPID399806229_riset1	4.87E-04
440	MTA3	57504	A_23_P411431_riset1	4.90E-04
441	CST7	8530	A_23_P68601_riset1	4.91E-04
442	CCT2	10576	A_23_P105392_riset1	4.94E-04
443	XBP1	7494	A_23_P120845_riset1	4.97E-04
444	ATP5F1	515	A_23_P46275_riset1	4.98E-04
445	EVI5	7813	A_24_P96593_riset1	5.09E-04
446	LEPROT	54741	A_24_P148094_riset1	5.09E-04
447	FGD2	221472	A_23_P300852_riset1	5.18E-04
448	WHDC1L1	339005	A_24_P118489_riset1	5.18E-04
449	AKAP8L	26993	A_23_P153767_riset1	5.20E-04
450	VSIG4	11326	A_23_P217269_riset1	5.20E-04
451	BZW1	9689	MIL_PPPID399200334_riset1	5.20E-04
452	CREBL2	1389	A_24_P56194_riset1	5.22E-04
453	GRN	2896	A_23_P49708_riset1	5.28E-04
454	PCGF6	84108	A_23_P115703_riset1	5.29E-04
455	LMO2	4005	A_23_P53126_riset1	5.30E-04

456	IQCK	124152	A_23_P324523_riset1	5.32E-04
457	KIF1C	10749	KIF1C_riset2	5.33E-04
458	KIF3C	3797	A_23_P120325_riset1	5.37E-04
459	PLAU	5328	A_23_P24104_riset1	5.45E-04
460	FYN	2534	MIL_PPPID402610592_riset2	5.46E-04
461	HEATR1	55127	A_23_P103628_riset1	5.52E-04
462	AF113698	-	A_24_P341646_riset1	5.52E-04
463	TCIRG1	10312	TCIRG1_riset2	5.58E-04
464	CLCF1	23529	A_23_P138760_riset1	5.62E-04
465	KLF1	10661	A_32_P135555_riset1	5.64E-04
466	MGC24039	160518	A_23_P379746_riset1	5.74E-04
467	NFE2	4778	NFE2_riset2	5.76E-04
468	PFKM	5213	A_24_P98914_riset1	5.78E-04
469	PLCL1	5334	A_24_P294199_riset1	5.80E-04
470	CCR8	1237	A_23_P211699_riset1	5.82E-04
471	CKB	1152	A_23_P25674_riset1	5.90E-04
472	FLJ30277	-	A_24_P162128_riset1	5.93E-04
473	C20ORF103	24141	A_23_P40295_riset1	6.04E-04
474	LTB	4050	A_23_P93348_riset1	6.07E-04
475	CHST11	50515	A_23_P139919_riset1	6.10E-04
476	CEACAM1	634	A_24_P382319_riset1	6.10E-04
477	CALML4	91860	MIL_PPPID394453361_riset1	6.11E-04
478	RBMS1	5937	MIL_PPPID394307820_riset1	6.12E-04
479	TFB1M;TIA M2	26230;51106	A_23_P93499_riset1	6.17E-04
480	LOC388210	388210	MIL_PPPID400032853_riset1	6.20E-04
481	MCM3	4172	A_23_P7873_riset2	6.22E-04
482	IGHA1	-	A_23_P136026_riset1	6.30E-04
483	IGLV3-19	28797	A_24_P161764_riset1	6.30E-04
484	C1ORF142	116841	A_23_P393607_riset1	6.35E-04
485	FANCE	2178	A_23_P42335_riset1	6.36E-04
486	AK5	26289	A_24_P342632_riset1	6.38E-04
487	NAP1L1	4673	A_32_P59262_rev_riset1	6.39E-04
488	DDX58	23586	A_23_P20814_riset1	6.42E-04
489	IRAK2	3656	IRAK2_riset2	6.43E-04
490	GARNL1	253959	A_23_P151565_riset1	6.43E-04

491	NARS2	79731	A_23_P24960_riset1	6.44E-04
492	CSF2RB	1439	A_23_P120899_riset1	6.47E-04
493	CASP5	838	CASP5_riset2	6.47E-04
494	DIMT1L	27292	A_23_P58529_riset1	6.48E-04
495	GNB4	59345	A_32_P171313_riset1	6.54E-04
496	TNFAIP6	7130	A_23_P165624_riset1	6.55E-04
497	IL1RN	3557	A_23_P209990_riset1	6.58E-04
498	DFNB59	494513	A_24_P630490_riset1	6.62E-04
499	EXOSC1	51013	A_32_P126686_riset1	6.71E-04
500	SLC25A4	291	A_24_P206047_riset1	6.74E-04
501	A_24_P49291 9	-	A_24_P492919_riset1	6.76E-04
502	CARD11	84433	A_23_P82324_riset1	6.77E-04
503	C1ORF217	84719	A_23_P23234_riset1	6.77E-04
504	SLC25A37	51312	A_32_P197026_riset1	6.78E-04
505	PSMC6	5706	A_24_P381625_riset1	6.80E-04
506	NFIA	4774	A_32_P131998_riset1	6.82E-04
507	TM2D1	83941	A_23_P148959_riset1	6.83E-04
508	ATR	545	A_23_P136058_riset1	6.86E-04
509	VCPIP1	80124	A_32_P74366_riset1	6.87E-04
510	WDR45L	56270	A_23_P207020_riset1	6.88E-04
511	ATG5	9474	A_24_P175059_riset1	6.91E-04
512	NUCKS1	64710	A_24_P919789_riset1	6.92E-04
513	LTB4R	1241	A_23_P151791_riset1	6.92E-04
514	POLR1D	51082	MIL_PPPID399200298_riset1	6.94E-04
515	PIGK	10026	A_24_P379512_riset1	7.06E-04
516	SIP1	8487	A_23_P88194_riset1	7.13E-04
517	PRICKLE1	144165	A_23_P408285_riset1	7.16E-04
518	ARHGEF9	23229	A_24_P254551_riset1	7.20E-04
519	MGC29891	126626	A_24_P191207_riset1	7.21E-04
520	AQP1	358	A_23_P19894_riset1	7.22E-04
521	CCDC90B	60492	A_23_P162127_riset1	7.25E-04
522	SYT11	23208	A_24_P139899_riset1	7.26E-04
523	LOC440354	440354	A_24_P213487_riset1	7.31E-04
524	TRD@	6964	MIL_PPPID399200174_riset1	7.36E-04
525	KIF21A	55605	A_24_P366315_riset1	7.41E-04

526	MOBKL2A	126308	MOBKL2A_riset2	7.44E-04
527	LRBA	987	A_24_P360078_riset1	7.48E-04
528	AK095738	-	A_32_P20221_riset1	7.54E-04
529	CENPQ	55166	A_23_P70328_riset1	7.58E-04
530	CXCL16	58191	CXCL16_riset2	7.63E-04
531	USP47	55031	A_23_P403588_riset1	7.64E-04
532	TGFBR3	7049	A_23_P200780_riset1	7.70E-04
533	CD96	10225	A_23_P44154_riset1	7.70E-04
534	PTK2B	2185	PTK2B_riset2	7.73E-04
535	CDC42BPA	8476	A_24_P944299_riset1	7.76E-04
536	C21ORF34	388815	A_24_P229536_riset1	7.77E-04
537	N-PAC	84656	N-PAC_riset2	7.83E-04
538	TMSB4X;TM SL3	7114;7117	MIL_PPPID399806171_riset1	7.93E-04
539	A_24_P29730 2	-	A_24_P297302_riset1	7.93E-04
540	LTBP3	4054	A_32_P72340_riset1	7.95E-04
541	MNAT1	4331	A_23_P32615_riset1	8.02E-04
542	DNAJC18	202052	A_32_P149251_riset1	8.03E-04
543	PRNP	5621	A_23_P109143_riset1	8.04E-04
544	BCL2	596	MIL_PPPID394453506_riset1	8.04E-04
545	IL1R2	7850	A_23_P79398_riset1	8.05E-04
546	ARHGEF12	23365	A_24_P175783_riset1	8.10E-04
547	SRRD;TFIP11	24144;402055	A_32_P135382_riset1	8.12E-04
548	RASGEF1A	221002	A_23_P391344_riset1	8.17E-04
549	GPRASP1	9737	A_32_P769161_riset1	8.20E-04
550	UCP3	7352	A_23_P203601_riset1	8.21E-04
551	GNAQ	2776	A_23_P39990_riset1	8.26E-04
552	DHX8	1659	A_23_P124224_riset1	8.44E-04
553	FAM29A	54801	A_32_P3290_riset1	8.46E-04
554	ABCA1	19	A_24_P289265_riset1	8.47E-04
555	PCM1	5108	A_24_P555510_riset1	8.54E-04
556	TBCD	6904	A_24_P275873_riset1	8.54E-04
557	AGMAT	79814	A_24_P936171_riset1	8.60E-04
558	IFITM2	10581	IFITM2_riset2	8.61E-04
559	PSMB4	5692	A_23_P761_riset1	8.62E-04

560	ITGAE	3682	A_23_P218378_riset1	8.64E-04
561	A_24_P94231	-	A_24_P942312_riset1	8.65E-04
562	ARPC4	10093	A_24_P20383_riset1	8.70E-04
563	MAFG;LOC6 44132	4097;644132	A_23_P78209_riset1	8.73E-04
564	GABARAPL1	23710	A_23_P162640_riset1	8.76E-04
565	ELP2	55250	A_23_P78438_riset1	8.83E-04
566	ACSL1	2180	MIL_PPPID394307996_riset1	8.92E-04
567	LOC441641	441641	A_24_P307443_riset1	9.07E-04
568	C19ORF43	79002	A_23_P164821_riset1	9.08E-04
569	TSPAN5	10098	A_23_P323930_riset1	9.08E-04
570	RORA	6095	RORA_riset2	9.09E-04
571	TRAF7	84231	TRAF7_riset2	9.14E-04
572	TLR1	7096	TLR1_riset2	9.21E-04
573	CD5	921	A_24_P364221_riset1	9.23E-04
574	TUFT1	7286	A_32_P141184_rev_riset1	9.23E-04
575	CCR6	1235	A_24_P234921_riset1	9.30E-04
576	GCC2	9648	A_23_P384085_riset1	9.55E-04
577	ACOT2	10965	A_23_P3111_riset1	9.62E-04
578	C1ORF26	54823	A_23_P96931_riset1	9.67E-04
579	PCNA	5111	A_23_P28886_riset1	9.69E-04
580	IL2RB	3560	A_24_P203000_riset1	9.86E-04
581	CCDC98;MR PS18C	55297	A_24_P372959_riset1	9.89E-04
582	GATA3	2625	A_23_P75056_riset1	9.91E-04
583	ALDH4A1	8659	A_32_P192970_riset1	9.93E-04
584	AI378923	-	A_24_P833024_riset1	9.99E-04
585	APEX1	328	A_23_P151649_riset1	1.01E-03
586	ZNF547	284306	A_23_P333592_riset1	1.01E-03
587	MAL	4118	MIL_PPPID394307800_riset1	1.02E-03
588	FN1	2335	A_24_P119745_riset1	1.02E-03
589	KIF3A	11127	A_23_P122027_riset1	1.04E-03
590	FAIM	55179	A_23_P253932_riset1	1.04E-03
591	CAD	790	A_23_P40049_riset1	1.04E-03
592	SSR4	6748	A_23_P259172_riset1	1.04E-03
593	UCKL1	54963	A_23_P17326_riset1	1.05E-03

594	C14ORF129	51527	A_24_P292710_riset1	1.06E-03
595	GLS	2744	A_23_P39766_riset1	1.06E-03
596	COX6C	1345	A_23_P8900_riset1	1.06E-03
597	NGFRAP1	27018	A_23_P45524_riset1	1.08E-03
598	ITGAX	3687	A_24_P344251_riset1	1.11E-03
599	ALS2CR13	150864	A_32_P195401_riset1	1.11E-03
600	CA4	762	A_23_P4096_riset1	1.11E-03
601	ABCB1	5243	A_23_P82526_riset1	1.11E-03
602	SOD1	6647	A_23_P154840_riset2	1.11E-03
603	PIP4K2A	5305	A_23_P104344_riset1	1.12E-03
604	AF263545	-	A_24_P926507_riset1	1.12E-03
605	ZNF804A	91752	A_32_P316136_riset1	1.12E-03
606	TACSTD1	4072	A_23_P91081_riset1	1.12E-03
607	CLEC5A	23601	A_23_P71165_riset1	1.12E-03
608	ID3	3399	A_23_P137381_riset1	1.13E-03
609	A_23_P14797 0	-	A_23_P147970_riset1	1.13E-03
610	MT2A	4502	A_23_P252413_riset1	1.14E-03
611	ZDHHC4	55146	A_23_P157147_riset1	1.14E-03
612	TLOC1	7095	A_23_P357856_riset1	1.15E-03
613	C5ORF37	134359	A_32_P209079_riset1	1.16E-03
614	PGM5	5239	A_24_P120907_riset1	1.16E-03
615	MTERFD2	130916	A_32_P431601_riset1	1.17E-03
616	GTL3	29105	A_23_P3514_riset1	1.17E-03
617	AK094334	-	A_24_P933514_riset1	1.17E-03
618	CCR5	1234	A_23_P412321_riset1	1.18E-03
619	RBM3	5935	RBM3_riset2	1.19E-03
620	AK095831		A_24_P639671_riset1	1.19E-03
621	AF116673		A_23_P327134_riset1	1.21E-03
622	LOC162632	162632	A_24_P566764_riset1	1.21E-03
623	BASP1	10409	A_23_P213386_riset1	1.21E-03
624	MIER1	57708	A_24_P230916_riset1	1.23E-03
625	TAF1B	9014	A_23_P165891_riset1	1.24E-03
626	HSPH1	10808	A_23_P88119_riset2	1.24E-03
627	GCSH	2653	A_23_P117933_riset1	1.24E-03
628	PTPN11	5781	A_32_P61757_riset1	1.24E-03

629	NOSIP	51070	NOSIP_riset2	1.25E-03
630	BCL6	604	BCL6_riset2	1.25E-03
631	LOC644538	644538	A_32_P48842_riset1	1.28E-03
632	NEDD9	4739	A_24_P883577_riset1	1.29E-03
633	UCHL5	51377	A_23_P148798_riset1	1.31E-03
634	LOC390306	-	A_24_P392842_riset1	1.32E-03
635	BCKDHB	594	A_24_P239664_riset1	1.32E-03
636	NUDT16	131870	A_23_P310560_riset1	1.33E-03
637	CD163	9332	A_23_P33723_riset1	1.33E-03
638	DNAJC19	131118	A_23_P121396_riset1	1.33E-03
639	ADH1A	124	A_23_P58359_riset1	1.34E-03
640	DNAJC16	23341	A_23_P358009_riset1	1.34E-03
641	CXCR3	2833	A_23_P114299_riset1	1.35E-03
642	PIN4	5303	A_23_P315345_riset1	1.35E-03
643	ATP6V1G1	9550	A_23_P20882_riset1	1.36E-03
644	M-RIP	23164	MIL_PPPID394453401_riset1	1.37E-03
645	PRKAB2	5565	A_24_P105564_riset1	1.37E-03
646	PPAP2A	8611	A_23_P70060_riset1	1.41E-03
647	HRH2	3274	HRH2_riset2	1.42E-03
648	CRIP3	401262	A_23_P156562_riset1	1.42E-03
649	LOC284262	283788	A_24_P497437_riset1	1.42E-03
650	NPIP;LOC339 047;LOC6427 78;LOC64279 9	339047;642778;6427 99;9284	A_32_P189974_riset1	1.42E-03
651	TGFBR1	7046	MIL_PPPID397416295_riset1	1.43E-03
652	TGFB1	7040	A_23_P412335_riset1	1.43E-03
653	HPCAL4	51440	A_24_P139665_riset1	1.44E-03
654	LIMK1	3984	LIMK1_riset2	1.44E-03
655	NDUFA4	4697	A_23_P145777_riset1	1.45E-03
656	IL24	11009	A_23_P51951_riset1	1.45E-03
657	EIF1	10209	A_32_P53049_riset1	1.45E-03
658	AW270158	0	A_24_P389612_riset1	1.47E-03
659	TSHZ3	57616	A_23_P361014_riset1	1.47E-03
660	FCGR2A;FC GR2C	2212;9103	A_23_P85716_riset1	1.48E-03
661	BC028022	-	A_32_P159574_riset1	1.48E-03

662	MMP8	4317	A_23_P24493_riset1	1.48E-03
663	AQP3	360	A_23_P112481_riset1	1.49E-03
664	PLEK2	26499	A_23_P151506_riset1	1.50E-03
665	LOC644186	643837	A_32_P196036_riset1	1.52E-03
666	MANSC1	54682	A_23_P162211_riset1	1.53E-03
667	MMP9	4318	A_23_P40174_riset1	1.54E-03
668	SLC10A4	201780	A_23_P314811_riset1	1.54E-03
669	KIF14	9928	A_23_P149668_riset1	1.54E-03
670	ORAI3	93129	ORAI3_riset2	1.55E-03
671	PSMD7	5713	A_23_P106741_riset1	1.55E-03
672	ZNF227;ZNF 235	7770;9310	A_23_P208325_riset1	1.56E-03
673	REEP3	221035	A_23_P75028_riset1	1.56E-03
674	PDCD2	5134	A_23_P145153_riset1	1.57E-03
675	RPAP3	79657	A_23_P2683_riset1	1.57E-03
676	LOC643641;S SPO	-	A_24_P795230_riset1	1.57E-03
677	CHMP1A	5119	MIL_PPPID394307932_riset1	1.58E-03
678	RBL2	5934	A_24_P416159_riset1	1.58E-03
679	EPRS	2058	A_23_P97632_riset1	1.58E-03
680	TNFRSF25	8718	TNFRSF25_riset2	1.59E-03
681	LY9	4063	MIL_PPPID397416255_riset1	1.60E-03
682	BCS1L	617	A_23_P154086_riset1	1.60E-03
683	IGBP1	3476	A_23_P171249_riset1	1.60E-03
684	RBM3	5935	RBM3_riset2	1.62E-03
685	CFLAR	8837	CFLAR_riset2_piqor	1.62E-03
686	ABCC4	10257	A_24_P16913_riset1	1.62E-03
687	ZRANB3	84083	A_23_P412059_riset1	1.62E-03
688	FAM152A	51029	A_23_P201445_riset1	1.62E-03
689	JDP2	122953	A_23_P117582_riset1	1.63E-03
690	AFF3	3899	A_23_P373464_riset1	1.64E-03
691	CENPM	79019	A_24_P399888_riset1	1.64E-03
692	LOC342892	342892	A_24_P450596_riset1	1.65E-03
693	MICAL2	9645	A_23_P24843_riset1	1.65E-03
694	SPATA6	54558	A_23_P327483_riset1	1.66E-03
695	LILRB2	10288	LILRB2_riset2	1.66E-03

696	CCDC46	201134	A_32_P391586_riset1	1.67E-03
697	TTC27	55622	A_23_P131227_riset1	1.68E-03
698	PDGFB	5155	PDGFB_riset2_piqor	1.69E-03
699	ZAP70	7535	ZAP70_riset2_piqor	1.69E-03
700	BCL2L13	23786	BCL2L13_riset2	1.71E-03
701	LOC731062	730130	A_24_P695306_riset1	1.71E-03
702	DEPDC5	9681	A_23_P91680_riset1	1.72E-03
703	THC2385462	-	A_32_P137819_riset1	1.72E-03
704	CKS1B	1163	A_23_P45917_riset1	1.72E-03
705	ADAMTS7;L OC388194;LO C390660;LOC 400406;LOC4 00419;LOC44 1730;LOC642 935	11173;390660;38819 4;400406;400419;441 730;642935	A_32_P786651_riset1	1.72E-03
706	SLC2A3	6515	A_24_P81900_riset1	1.73E-03
707	ZAK	51776	A_23_P318300_riset1	1.73E-03
708	KIAA0494	9813	A_24_P233917_riset1	1.73E-03
709	MFAP1	4236	MFAP1_riset2	1.73E-03
710	USP45	85015	MIL_PPPID399200134_riset1	1.74E-03
711	LOC283788	283788	A_24_P497437_riset1	1.74E-03
712	PFAS	5198	A_23_P402604_riset1	1.75E-03
713	DIDO1	11083	MIL_PPPID399200182_riset1	1.75E-03
714	THC2380706	-	A_24_P214556_riset1	1.77E-03
715	PLD4	122618	A_23_P88222_riset1	1.77E-03
716	MTX2	10651	A_23_P120335_riset1	1.77E-03
717	DDX10	1662	A_23_P32938_riset1	1.77E-03
718	DKFZP564A0 769	-	MIL_PPPID400032813_riset1	1.78E-03
719	HBXIP	10542	A_32_P163361_riset1	1.78E-03
720	SR140	23350	A_24_P943106_riset1	1.79E-03
721	ORMDL2	29095	A_24_P124567_riset1	1.79E-03
722	THC2377375	-	A_32_P34703_riset1	1.80E-03
723	LAX1	54900	A_24_P291278_riset1	1.81E-03
724	LRRC25	126364	A_23_P165136_riset1	1.81E-03
725	AP3S2	10239	A_24_P287683_riset1	1.81E-03
726	SYK	6850	A_23_P9255_riset1	1.82E-03

727	POLRMT	5442	A_23_P131096_riset1	1.82E-03
728	OMD	4958	A_23_P94397_riset1	1.83E-03
729	KIR3DX1	90011	A_23_P398943_riset1	1.83E-03
730	TMED10	10972	A_24_P917833_riset1	1.83E-03
731	FA2H	79152	A_23_P49448_riset1	1.84E-03
732	MXD1	4084	A_23_P408094_riset1	1.85E-03
733	ITSN2	50618	MIL_PPPID399200362_riset1	1.85E-03
734	POLG2	11232	A_23_P26905_riset1	1.86E-03
735	BACE2	25825	A_23_P154875_riset1	1.86E-03
736	SLC8A1	6546	A_32_P147078_riset1	1.87E-03
737	L3MBTL3	84456	A_32_P67533_riset1	1.87E-03
738	ENTPD5	957	A_23_P117580_riset1	1.88E-03
739	KLHDC1	122773	A_23_P422766_riset1	1.88E-03
740	CCR3	1232	A_23_P250302_riset1	1.89E-03
741	STARD9	57519	A_32_P130641_riset1	1.91E-03
742	C19ORF18	147685	A_23_P303803_riset1	1.91E-03
743	VPS11	55823	A_32_P28351_riset1	1.92E-03
744	POLR3H	171568	A_24_P322847_riset1	1.93E-03
745	SLC38A2	54407	A_24_P295963_riset1	1.93E-03
746	MRPS22	56945	A_32_P32503_riset1	1.94E-03
747	ENST0000037 7226	-	A_24_P494425_riset1	1.95E-03
748	LUC7L2	51631	A_23_P59787_riset1	1.97E-03
749	IL1R1	3554	A_24_P200023_riset1	1.98E-03
750	MYO1B	4430	A_23_P361049_riset1	1.98E-03
751	IGF1	3479	A_24_P398572_riset1	1.98E-03
752	ERRFI1	54206	A_23_P46470_riset1	2.00E-03
753	ABAT	18	A_24_P330684_riset1	2.01E-03
754	C8ORF13	83648	A_23_P334955_riset1	2.01E-03
755	RAP1A	5906	A_23_P51746_riset1	2.01E-03
756	RNF19B	127544	A_23_P321388_riset1	2.02E-03
757	PTPLAD2	401494	A_32_P101313_riset1	2.02E-03
758	ZNF24	7572	A_23_P208041_riset1	2.03E-03
759	RCAN2	10231	MIL_PPPID394307944_riset1	2.04E-03
760	BX111338	-	A_32_P210284_riset1	2.04E-03
761	C9ORF19	152007	A_32_P164477_rev_riset1	2.05E-03

762	KDELC2	143888	MIL_PPPID399200238_riset1	2.05E-03
763	SLC7A11	23657	A_32_P42684_riset1	2.05E-03
764	NLRC5	84166	A_23_P253295_riset1	2.06E-03
765	C5AR1	728	A_23_P303058_riset1	2.07E-03
766	VCAM1	7412	A_23_P34345_riset1	2.09E-03
767	DDX51	317781	MIL_PPPID399200214_riset1	2.10E-03
768	HOMER1	9456	A_23_P41917_riset1	2.11E-03
769	ZNF75A	7627	A_23_P129587_riset1	2.11E-03
770	ZNF181	339318	A_23_P50735_riset1	2.11E-03
771	IKZF1	10320	MIL_PPPID399200138_riset1	2.13E-03
772	TRAF5	7188	TRAF5_riset2	2.13E-03
773	ARHGEF11	9826	A_23_P426809_riset1	2.14E-03
774	KRR1	11103	A_23_P2216_riset1	2.15E-03
775	RACGAP1	29127	A_23_P65110_riset1	2.17E-03
776	RDH5	5959	A_24_P218814_riset1	2.17E-03
777	PDSS2	57107	A_23_P134167_riset1	2.18E-03
778	SIRPA	140885	A_24_P267619_riset1	2.18E-03
779	NLRC4	58484	A_23_P119835_riset1	2.18E-03
780	CTNNAL1	8727	A_23_P157795_riset1	2.18E-03
781	A_32_P12452	-	A_32_P124521_riset1	2.18E-03
782	TRIM13	10206	A_23_P99360_riset1	2.19E-03
783	GEMIN7	79760	A_23_P89910_riset1	2.19E-03
784	RNF24	11237	A_23_P120533_riset1	2.20E-03
785	FLJ35626	-	MIL_PPPID400032821_riset1	2.20E-03
786	TP63	8626	A_23_P327380_riset1	2.20E-03
787	ALDH7A1	501	A_23_P70233_riset1	2.21E-03
788	C2ORF61	285051	A_32_P776863_riset1	2.21E-03
789	TIMP1	7076	A_23_P62106_riset1	2.22E-03
790	TMEM97	27346	A_24_P190168_riset1	2.23E-03
791	IPO9	55705	A_32_P323557_riset1	2.23E-03
792	CREG1	8804	A_23_P85742_riset1	2.25E-03
793	IL18RAP	8807	IL18RAP_riset2	2.25E-03
794	IL15RA	3601	MIL_PPPID394307896_riset1	2.25E-03
795	SLC25A6	293	A_23_P33752_riset1	2.25E-03
796	ACSS1	84532	A_23_P120594_riset1	2.25E-03

797	HMGN4	10473	A_23_P19389_riset1	2.26E-03
798	SH3BP5	9467	A_23_P143964_riset1	2.26E-03
799	REPS1	85021	A_23_P70748_riset1	2.27E-03
800	СОРЕ	11316	A_23_P209089_riset1	2.27E-03
801	MTCO1	140539	MTCO1_riset2	2.28E-03
802	TFEC	22797	A_32_P184390_riset1	2.30E-03
803	AMBP	259	A_23_P363754_riset1	2.30E-03
804	CD7	924	A_23_P118862_riset1	2.31E-03
805	FAM120C	54954	A_32_P67623_riset1	2.31E-03
806	PSMB1	5689	A_24_P233570_riset2	2.32E-03
807	EPO	2056	A_23_P145664_riset1	2.33E-03
808	SRPK3	26576	A_23_P114381_riset1	2.34E-03
809	ATP1A1	476	A_23_P1075_riset1	2.35E-03
810	ANG	283	A_23_P428738_riset1	2.35E-03
811	UBA52	7311	MIL_PPPID397416235_riset1	2.36E-03
812	RAB7L1	8934	A_24_P234094_riset1	2.36E-03
813	INSM1	3642	A_23_P109184_riset1	2.36E-03
814	DOCK5	80005	A_23_P60089_riset1	2.36E-03
815	KLRF1	51348	A_32_P158966_riset1	2.37E-03
816	A_24_P76032 4	-	A_24_P760324_riset1	2.37E-03
817	GPR64	10149	A_23_P253692_riset1	2.38E-03
818	WDR54	84058	A_23_P68072_riset1	2.39E-03
819	LOC201725	201725	A_23_P54720_riset1	2.39E-03
820	CD82	3732	CD82_riset2	2.40E-03
821	HRB	3267	MIL_PPPID394453365_riset1	2.41E-03
822	SULT1C2	6819	MIL_PPPID394307976_riset1	2.41E-03
823	NBEAL1	65065	A_32_P433912_riset1	2.42E-03
824	PPM1B	5495	A_23_P209269_riset1	2.42E-03
825	TRAF2	7186	TRAF2_riset2	2.43E-03
826	SIRPA	140885	A_24_P267619_riset1	2.43E-03
827	BCL2L2	599	A_23_P418373_riset1	2.44E-03
828	HCG9	10255	A_23_P251021_riset1	2.46E-03
829	NSUN5	55695	A_23_P251505_riset1	2.47E-03
830	HERPUD1	9709	A_23_P54846_riset1	2.48E-03
831	SOCS3	9021	A_23_P207058_riset1	2.48E-03

832	TRAF6	7189	TRAF6_riset2	2.48E-03
833	GPR120	338557	A_24_P129588_riset1	2.50E-03
834	PCCA	5095	MIL_PPPID400032837_riset1	2.50E-03
835	HOXB6	3216	A_23_P66682_riset1	2.54E-03
836	TPST2	8459	A_23_P132226_riset1	2.54E-03
837	CENPJ	55835	A_32_P219116_riset1	2.55E-03
838	IL7	3574	A_23_P8961_riset1	2.55E-03
839	CD37	951	A_24_P82749_riset1	2.55E-03
840	PROCR	10544	A_23_P80040_riset1	2.56E-03
841	TMEM30B	161291	A_32_P129752_riset1	2.56E-03
842	ADAM28	10863	A_23_P10356_riset1	2.57E-03
843	CNN1	1264	A_23_P16239_riset1	2.57E-03
844	GCLC	2729	A_23_P145114_riset1	2.57E-03
845	AA789123	-	A_32_P485325_riset1	2.58E-03
846	FYCO1	79443	A_23_P212339_riset1	2.59E-03
847	NFATC3	4775	A_24_P373312_riset1	2.60E-03
848	ZNF606	80095	A_23_P4628_riset1	2.60E-03
849	MARVELD3	91862	A_23_P376372_riset1	2.60E-03
850	WNK1	65125	A_24_P51127_riset1	2.60E-03
851	GUSB	2990	GUSB_riset2	2.62E-03
852	IL1RN	3557	A_23_P209990_riset1	2.62E-03
853	CHI3L2	1117	A_23_P12082_riset1	2.62E-03
854	PTPN18	26469	A_24_P80135_riset1	2.62E-03
855	SLC14A1	6563	A_23_P38757_riset1	2.63E-03
856	LHFPL1	340596	A_23_P327499_riset1	2.66E-03
857	LONRF1	91694	A_32_P194032_riset1	2.67E-03
858	DEPDC1	55635	A_24_P25872_riset1	2.70E-03
859	PPP1R15A	23645	A_23_P90172_riset1	2.71E-03
860	ICA1L	130026	MIL_PPPID399200186_riset1	2.72E-03
861	PBK	55872	A_23_P82699_riset1	2.74E-03
862	AL036662	-	MIL_PPPID400032800_riset1	2.75E-03
863	SV2C	22987	MIL_PPPID399200154_riset1	2.76E-03
864	BM806490	-	A_32_P18448_riset1	2.76E-03
865	ASS1	445	A_23_P31922_riset1	2.76E-03
866	PPP2R5C	5527	MIL_PPPID397416279_riset1	2.77E-03

867	KIAA1754	85450	A_23_P340333_riset1	2.78E-03
868	FUT7	2529	A_23_P170534_riset1	2.79E-03
869	LOC205251	202051	A_24_P220897_riset1	2.79E-03
870	HMGN3	9324	A_23_P134047_riset1	2.80E-03
871	B3GNT1	11041	A_23_P86900_riset1	2.80E-03
872	DDX17	10521	MIL_PPPID399200270_riset1	2.81E-03
873	NECAP2	55707	A_23_P97296_riset1	2.82E-03
874	PPM1A	5494	A_24_P407323_riset1	2.82E-03
875	CRK	1398	CRK_riset2	2.82E-03
876	LEUTX	342900	A_24_P796321_riset1	2.83E-03
877	ENPP2	5168	A_23_P94333_riset1	2.83E-03
878	ZFP14	57677	A_24_P186342_riset1	2.84E-03
879	ZNF789	285989	A_32_P542928_riset1	2.84E-03
880	MITF	4286	A_23_P426663_riset1	2.85E-03
881	HGD	3081	A_23_P250164_riset1	2.85E-03
882	C17ORF39	79018	A_23_P164427_riset1	2.89E-03
883	NUSAP1	51203	A_24_P416079_riset2	2.89E-03
884	нохв3	3213	A_24_P399220_riset1	2.94E-03
885	STAMBPL1	57559	A_23_P385322_riset1	2.95E-03
886	ADA	100	A_23_P210482_riset1	2.97E-03
887	GZMM	3004	A_23_P130835_riset1	3.01E-03
888	PPIC	5480	A_23_P84018_riset1	3.02E-03
889	ALDH5A1	7915	A_24_P923353_riset1	3.04E-03
890	ATF4	468	ATF4_riset2_piqor	3.05E-03
891	C1ORF19	116461	A_23_P104022_riset1	3.05E-03
892	SP100	6672	MIL_PPPID397416199_riset1	3.07E-03
893	SLC26A2	1836	A_23_P250951_riset1	3.08E-03
894	RBBP6	5930	A_23_P363206_riset1	3.09E-03
895	CD180	4064	A_23_P257815_riset1	3.09E-03
896	CCL5	6352	A_23_P152837_riset1	3.09E-03
897	IL18	3606	A_23_P104798_riset1	3.10E-03
898	PLSCR1	5359	A_23_P69109_riset1	3.11E-03
899	SEH1L	81929	A_24_P407930_riset1	3.12E-03
900	POLR1B	84172	MIL_PPPID394307972_riset1	3.16E-03
901	RTN4IP1	84816	A_23_P122775_riset1	3.17E-03

902	HLCS	3141	A_23_P304991_riset1	3.17E-03
903	FAHD1	81889	MIL_PPPID394453514_riset1	3.17E-03
904	STK24	8428	MIL_PPPID399200194_riset1	3.17E-03
905	KIAA1618	57714	A_24_P350124_riset1	3.18E-03
906	W86478	-	MIL_PPPID400032829_riset1	3.19E-03
907	AF088076	-	A_24_P828496_riset1	3.19E-03
908	ITGA2B	3674	A_23_P77971_riset1	3.20E-03
909	GTPBP4	23560	A_23_P12874_riset1	3.21E-03
910	C6ORF62	81688	A_23_P422222_riset1	3.22E-03
911	AK124263	-	A_24_P538708_riset1	3.26E-03
912	ARMETL1	441549	A_24_P93309_riset1	3.27E-03
013 r	HLTF_intron_ etention_betw een_exon25_a nd_exon26	6596	MIL_PPPID394307747_riset1	3.28E-03
914	T79183	-	A_24_P536974_riset1	3.29E-03
915	ZNF12	7559	A_23_P31335_riset1	3.29E-03
916	ICAM1	3383	A_23_P153320_riset1	3.30E-03
917	PSMD14	10213	A_23_P165691_riset1	3.30E-03
918	AK024681	-	A_24_P513262_riset1	3.31E-03
919	HSP90AA1	3320	A_23_P162866_riset2	3.31E-03
920	EEF1D	1936	MIL_PPPID399806184_riset1	3.37E-03
921	MTCO3	4514	MTCO3_riset2	3.38E-03
922	C6ORF166	55122	A_23_P428819_riset1	3.39E-03
923	MT1E	4493	MIL_PPPID399806219_riset1	3.41E-03
924	ABCD3	5825	A_23_P74790_riset1	3.41E-03
925	ZNF229	7772	A_23_P130509_riset1	3.42E-03
926	CARD6	84674	A_23_P41854_riset1	3.43E-03
927	GZMB	3002	A_23_P117602_riset1	3.43E-03
928	COL6A2	1292	MIL_PPPID394307828_riset1	3.44E-03
929	IL2RA	3559	A_23_P127288_riset1	3.45E-03
930	IL1RL2	8808	A_23_P56604_riset1	3.45E-03
931	PAICS	10606	A_24_P200427_riset1	3.46E-03
932	HNRNPR	10236	A_23_P45726_riset1	3.48E-03
933	LOC642897	642897	A_24_P84401_riset1	3.48E-03
934	TOLLIP	54472	TOLLIP_riset2	3.49E-03

935	HCG_198546	388524;389672;3921	MIL_PPPID399806188_riset1	3.49E-03
936	MGST1	4257	A_23_P36658_riset1	3.49E-03
937	ACACB	32	A_23_P87791_riset1	3.50E-03
938	GGPS1	9453	MIL_PPPID394308008_riset1	3.50E-03
939	RUNX1	861	A_24_P96403_riset1	3.51E-03
940	PSMA3	5684	MIL_PPPID402610696_riset2	3.53E-03
941	SRM	6723	A_23_P74269_riset1	3.54E-03
942	SDCCAG3	10807	A_23_P258272_riset1	3.55E-03
943	POLR3B	55703	A_23_P87732_riset1	3.56E-03
944	PDLIM5	10611	A_24_P24263_riset1	3.57E-03
945	CEP110	11064	A_23_P43580_riset1	3.57E-03
946	AI218358	-	A_32_P60429_riset1	3.58E-03
947	IL11RA	3590	A_23_P71867_riset1	3.59E-03
948	C1QA	712	C1QA_riset2_piqor	3.59E-03
949	VIPR1	7433	A_24_P105933_riset1	3.61E-03
950	DSC2	1824	A_23_P4494_riset1	3.62E-03
951	FARP2	9855	A_24_P268474_riset1	3.63E-03
952	S100A11	6282	A_23_P126594_riset1	3.64E-03
953	EIF2C2	27161	A_23_P112159_riset1	3.66E-03
954	ACSS2	55902	MIL_PPPID394307920_riset1	3.66E-03
955	QPCT	25797	A_24_P71468_riset1	3.68E-03
956	FN1	2335	A_24_P119745_riset1	3.69E-03
957	TBC1D23	55773	A_23_P121489_riset1	3.70E-03
958	PTF1A	256297	A_23_P428329_riset1	3.70E-03
959	CLCN5	1184	CLCN5_riset2	3.71E-03
960	HPRT1	3251	HPRT_riset2_rtpcr	3.72E-03
961	FAM26F	441168	A_23_P7827_riset1	3.74E-03
962	BC007917	-	A_24_P300610_riset1	3.74E-03
963	KIAA1524	57650	A_24_P351466_riset1	3.74E-03
964	AP2B1	163	A_24_P253827_riset1	3.75E-03
965	RGS12	6002	A_24_P33705_riset1	3.77E-03
966	FOXO4	4303	FOXO4_riset2_piqor	3.78E-03
967	SMAD7	4092	A_23_P55518_riset1	3.79E-03
968	INS	3630	A_23_P1981_riset1	3.80E-03
969	RFX5	5993	A_24_P20032_riset1	3.81E-03

970	AVP	551	A_23_P109133_riset1	3.84E-03
971	SCYL2	55681	A_23_P204550_riset1	3.84E-03
972	ABCA1	19	A_24_P289265_riset1	3.84E-03
973	ZNF175	7728	A_24_P916266_riset1	3.85E-03
974	HLA-DMB	3109	A_23_P389924_riset1	3.86E-03
975	TGFB3	7043	A_23_P88404_riset1	3.86E-03
976	ARSB	411	MIL_PPPID394453526_riset1	3.86E-03
977	HLA-DMA	3108	A_23_P42304_riset1	3.87E-03
978	C3ORF68	152100	A_24_P408740_riset1	3.88E-03
979	GDF6	392255	A_32_P140489_riset1	3.89E-03
980	BCL3	602	A_23_P4662_riset1	3.90E-03
981	FYTTD1	84248	A_23_P80827_riset1	3.91E-03
982	LOC126917	121906	A_32_P537218_riset1	3.91E-03
983	IL2RG	3561	A_23_P148464_riset1	3.92E-03
984	TXNRD3	114112	A_32_P170925_riset1	3.92E-03
985	LIG4	3981	A_23_P25581_riset1	3.94E-03
986	RUNX3	864	A_23_P51231_riset1	3.94E-03
987	TRIP6	7205	A_23_P252128_riset1	3.97E-03
988	CSK	1445	CSK_riset2	3.97E-03
989	ANPEP	290	A_23_P88621_riset1	3.97E-03
990	CLEC11A	6320	A_23_P153489_riset1	4.04E-03
991	MAK10	60560	A_24_P309264_riset1	4.05E-03
992	DIRC2	84925	A_23_P80778_riset1	4.06E-03
993	F2	2147	A_32_P514031_riset1	4.06E-03
994	PEX1	5189	A_23_P20045_riset1	4.07E-03
995	MYT1;PCMT D2	4661;55251	A_23_P210829_riset1	4.07E-03
996	CASP8	841	CASP8_riset2	4.07E-03
997	CMIP	80790	A_23_P371239_riset1	4.08E-03
998	WDR23	80344	A_24_P326957_riset1	4.08E-03
999	CFLAR	8837	CFLAR_riset2_piqor	4.09E-03
1000	TOX	9760	A_24_P226755_riset1	4.10E-03
1001	LTBR	4055	A_23_P53557_riset1	4.12E-03
1002	AK021551	-	A_24_P621853_riset1	4.13E-03
1003	MAK	4117	A_24_P363278_riset1	4.13E-03
1004	PTPN7	5778	PTPN7_riset2	4.15E-03

1005	THC2317952	-	A_32_P164393_riset1	4.18E-03
1006	LGMN	5641	A_23_P25994_riset1	4.19E-03
1007	PPP1R3F	89801	A_23_P125541_riset1	4.23E-03
1008	TIMP1	7076	A_23_P62106_riset1	4.23E-03
1009	RCAN2	10231	MIL_PPPID394307944_riset1	4.23E-03
1010	GSTA2	2939	MIL_PPPID399806224_riset1	4.24E-03
1011	SMARCC2	6601	A_23_P128073_riset1	4.25E-03
1012	ARRDC3	57561	A_24_P414553_riset1	4.26E-03
1013	MCEE	84693	A_23_P56654_riset1	4.26E-03
1014	GBP2	2634	A_23_P85693_riset1	4.29E-03
1015	FLT3LG	2323	A_23_P78742_riset1	4.31E-03
1016	NRD1	4898	A_24_P746650_riset1	4.32E-03
1017	UFM1	51569	A_23_P99465_riset1	4.32E-03
1018	SURF6	6838	A_24_P21447_riset1	4.33E-03
1019	CNTN5	53942	A_23_P503059_riset1	4.34E-03
1020	CSF2RA	1438	A_23_P136174_riset1	4.34E-03
1021	IGF2	3481	MIL_PPPID397416219_riset1	4.35E-03
1022	F8	2157	A_24_P314451_riset1	4.36E-03
1023	BIN2	51411	A_23_P162386_riset1	4.38E-03
1024	COPS4	51138	COPS4_riset2	4.39E-03
1025	VDAC3	7419	A_23_P60069_riset1	4.40E-03
1026	AK000992	-	A_32_P29083_riset1	4.40E-03
1027	S100A8	6279	A_23_P434809_riset1	4.41E-03
1028	GPR174	84636	A_23_P11070_riset1	4.42E-03
1029	TNFSF10	8743	A_23_P121253_riset1	4.42E-03
1030	HOXB5	3215	A_23_P363316_riset1	4.43E-03
1031	TLR8	51311	A_23_P73837_riset1	4.43E-03
1032	CUGBP1	10658	A_23_P318396_riset1	4.46E-03
1033	ENTPD1	953	MIL_PPPID394453405_riset1	4.48E-03
1034	FBLN1	2192	A_23_P433016_riset1	4.48E-03
1035	FOXJ1	2302	A_23_P348636_riset1	4.48E-03
1036	PGM2L1	283209	A_32_P122703_riset1	4.49E-03
1037	FLJ14213	79899	A_23_P116512_riset1	4.54E-03
1038	MAPK1IP1L	93487	A_24_P107674_riset1	4.57E-03
1039	RNF4;LOC64 4006	6047;644006	MIL_PPPID397416195_riset1	4.57E-03

1072	MYC THC2404892	4609	MIL_PPPID404158649_riset2  A_32_P200120_riset1	4.9E-03 4.9E-03
1071	THC2375612	-	A_32_P144999_riset1	4.9E-03
1070	BE348404	-	A_32_P396516_riset1	4.9E-03
1069	C21ORF33	8209	A_23_P109333_riset1	4.9E-03
1068	CD86	942	A_24_P131589_riset1	4.8E-03
1067	TESK1	7016	A_23_P169178_riset1	4.8E-03
1066	OBFC1	79991	A_23_P46852_riset1	4.8E-03
1065	FLJ14327	79972	A_23_P377935_riset1	4.8E-03
1064	PRO2964	55415	A_23_P430156_riset1	4.8E-03
1063	CRAT	1384	A_23_P32199_riset1	4.8E-03
1062	FPRL1	2358	A_23_P55649_riset1	4.8E-03
1061	NOP5/NOP58	51602	A_23_P154447_riset1	4.7E-03
1060	SREBF1	6720	SREBF1_riset2	4.7E-03
	A_24_P24415	- 6720	A_24_P24415_riset1	
1058				4.7E-03 4.7E-03
1057	PEX5	5830	A_23_P48246_riset1	4.7E-03 4.7E-03
1057	TRAT1	50852	A_32_141020_fiset1  A_23_P212568_riset1	4.7E-03
1056	SC5DL	6309	A_32_P41026_riset1	4.7E-03
1055	EDG4	9170	A_23_P101829_riset1	4.7E-03
1054	MXD4	10608	A_24_P234732_riset1	4.7E-03
1053	C20ORF117	140710	A_23_P5936_riset1	4.7E-03
1052	00101118 C11ORF48	79081	A_23_P1944_riset1	4.7E-03
1051	TTTY8;LOC1	100101118;84673	A_23_P45592_riset1	4.7E-03
1050	CNKSR3	154043	A_23_P134085_riset1	4.66E-03
1049	GEMIN4	50628	A_23_P66867_riset1	4.63E-03
1048	MAP2K6	5608	A_23_P207445_riset1	4.61E-03
1047	MCM3AP;M CM3APAS	114044;8888	A_23_P120744_riset1	4.61E-03
1046	C1ORF21	81563	A_24_P173754_riset1	4.60E-03
1045	GGTLA4	92086	A_23_P57199_riset1	4.60E-03
1044	THC2315602	_	A_32_P65067_riset1	4.59E-03
1043	IL17RA	23765	IL17RA riset2	4.59E-03
1042	SF3B1	23451	A_32_P31633_riset1	4.58E-03
1041	C10ORF2	56652	A_24_P258073_riset1	4.58E-03
1040	FASTKD1	79675	A_23_P307624_riset1	4.58E-03

1074	RET	5979	MIL_PPPID397416187_riset1	4.9E-03
1075	ZFP2	80108	A_23_P133359_riset1	4.9E-03
1076	IRAK1	3654	IRAK1_riset2	5.0E-03
1077	TNIK	23043	A_24_P350576_riset1	5.0E-03
1078	PLA2G4C	8605	A_23_P50508_riset1	5.0E-03
1079	LGALS3	3958	A_23_P128919_riset2	5.0E-03
1080	FBP2	8789	A_23_P94472_riset1	5.1E-03
1081	TINF2	26277	A_23_P77020_riset1	5.1E-03
1082	KIDINS220	57498	A_24_P97145_riset1	5.1E-03
1083	RAP1GDS1	5910	A_23_P58207_riset1	5.1E-03
1084	MAP4K5	11183	A_23_P205646_riset1	5.1E-03
1085	KLRC1	3821	A_23_P139654_riset1	5.1E-03
1086	SLC11A1	6556	A_32_P436132_riset1	5.1E-03
1087	AUTS2	26053	A_32_P809435_riset1	5.2E-03
1088	SNRPC	6631	A_23_P59192_riset1	5.2E-03
1089	ZBTB32	27033	A_23_P131024_riset1	5.2E-03
1090	C22ORF16	400916	MIL_PPPID399200262_riset1	5.2E-03
1091	THC2376224	1	A_23_P165541_riset1	5.2E-03
1092	PHLDB2	90102	A_24_P240166_riset1	5.2E-03
1093	STOML2	30968	A_23_P256497_riset1	5.2E-03
1094	KIAA0776	23376	A_23_P30956_riset1	5.2E-03
1095	SDC1	6382	SDC1_riset2	5.2E-03
1096	TYW1	55253	A_24_P883109_riset1	5.2E-03
1097	EPOR	2057	A_23_P381954_riset1	5.2E-03
1098	DPYS	1807	A_23_P20303_riset1	5.3E-03
1099	FKBP1B	2281	A_23_P142631_riset1	5.3E-03
1100	LOC400566	400566	A_24_P624439_riset1	5.3E-03
1101	LILRB1	10859	LILRB1_riset2	5.3E-03
1102	LGALS8	3964	LGALS8_riset2	5.3E-03
1103	CLEC3B	7123	A_23_P69497_riset1	5.3E-03
1104	IQCE	23288	A_24_P266285_riset1	5.3E-03
1105	NFE2L2	4780	A_23_P5761_riset1	5.3E-03
1106	CDCA3;LOC 285636	285636;83461	A_23_P416801_riset1	5.3E-03
1107	EPSTI1	94240	A_23_P105794_riset1	5.4E-03
1108	C11ORF24	53838	A_23_P12911_riset1	5.4E-03

1109	BCCIP	56647	A_24_P30206_riset1	5.4E-03
1110	R3HDM1	23518	A_23_P380998_riset1	5.4E-03
1111	SRRM2	23524	A_24_P50988_riset1	5.4E-03
1112	UBD	10537	A_23_P81898_riset1	5.4E-03
1113	NPTN	27020	A_23_P37598_riset1	5.5E-03
1114	FNBP4	23360	A_23_P395595_riset1	5.5E-03
1115	SLC30A4	7782	A_32_P21255_riset1	5.5E-03
1116	TBRG1	84897	A_23_P98463_riset1	5.5E-03
1117	LHCGR;C6O RF62	3973;81688	A_24_P209204_riset1	5.5E-03
1118	HSPB7	27129	A_23_P103703_riset1	5.5E-03
1119	KRT72	140807	A_32_P48825_riset2	5.5E-03
1120	PEX7	5191	A_23_P93543_riset1	5.5E-03
1121	GSN	2934	A_23_P255884_riset1	5.5E-03
1122	AK3L1	205	MIL_PPPID394453462_riset1	5.6E-03
1123	ITGA9	3680	ITGA9_riset2	5.6E-03
1124	RNASET2	8635	A_24_P360269_riset1	5.6E-03
1125	OSTF1	26578	OSTF1_riset2_piqor	5.6E-03
1126	FBXW8	26259	A_24_P44279_riset1	5.6E-03
1127	SKI	6497	SKI_riset2	5.6E-03
1128	PDCD7	10081	A_24_P159181_riset1	5.6E-03
1129	ARHGAP17	55114	A_23_P15113_riset1	5.6E-03
1130	KIAA0586	9786	A_23_P106127_riset1	5.7E-03
1131	ITGAL	3683	A_23_P206806_riset1	5.7E-03
1132	RPS4Y1	6192	A_23_P259314_riset1	5.7E-03
1133	ECHS1	1892	A_23_P104362_riset1	5.7E-03
1134	SLC2A9	56606	A_24_P563745_riset1	5.7E-03
1135	HSPA4	3308	A_24_P377269_riset1	5.7E-03
1136	COL7A1	1294	COL7A1_riset2	5.7E-03
1137	CBLB	868	A_23_P212715_riset1	5.7E-03
1138	YPEL1	29799	A_32_P88120_riset1	5.7E-03
1139	C21ORF122	728039	A_23_P143514_riset1	5.7E-03
1140	FANCG	2189	A_23_P71644_riset1	5.8E-03
1141	RASSF7	8045	A_23_P52589_riset1	5.8E-03
1142	OTUD7A	161725	A_23_P3413_riset1	5.8E-03
1143	KIAA1109	84162	A_23_P147869_riset1	5.8E-03

1144	MRAS	22808	A_24_P88850_riset1	5.8E-03
1145	IGF2;INS- IGF2	3481;723961	A_23_P150609_riset1	5.8E-03
1146	TNFSF13B	10673	A_23_P14174_riset1	5.8E-03
1147	S100A9	6280	A_23_P23044_riset1	5.9E-03
1148	LGR6	59352	A_23_P23834_riset1	5.9E-03
1149	PLK4	10733	A_23_P155968_riset1	5.9E-03
1150	STAT1	6772	MIL_PPPID394307872_riset1	5.9E-03
1151	PLEKHA4	57664	A_24_P408047_riset1	5.9E-03
1152	MFI2	4241	MFI2_riset2_piqor	6.0E-03
1153	MBNL1	4154	A_23_P357811_riset1	6.1E-03
1154	MORF4L1	10933	A_24_P398898_riset1	6.1E-03
1155	FABP4	2167	A_23_P8820_riset1	6.1E-03
1156	CD200R1	131450	MIL_PPPID399200246_riset1	6.1E-03
1157	UTP15	84135	A_23_P213441_riset1	6.1E-03
1158	IFNA4	3441	IFNA4_riset2	6.1E-03
1159	FCRL3	115352	A_23_P358438_riset1	6.1E-03
1160	ARL11	115761	A_32_P902957_riset1	6.2E-03
1161	NFIL3	4783	A_23_P32253_riset1	6.2E-03
1162	ITGB7	3695	ITGB7_riset2_piqor	6.2E-03
1163	BCL2L1	598	A_23_P210886_riset1	6.2E-03
1164	CFL2	1073	A_24_P373152_riset1	6.2E-03
1165	TRAK2	66008	A_23_P209426_riset1	6.2E-03
1166	MGC24103	158295	A_23_P373100_riset1	6.2E-03
1167	MXI1	4601	MIL_PPPID394307804_riset1	6.3E-03
1168	CASP6	839	CASP6_riset2	6.3E-03
1169	SRGAP2P1	653464	A_24_P357869_riset1	6.3E-03
1170	WFDC2	10406	A_23_P218675_riset1	6.3E-03
1171	ZSCAN18	65982	A_23_P55682_riset1	6.3E-03
1172	GOT1	2805	A_24_P81473_riset1	6.3E-03
1173	UBQLN4	56893	A_24_P239266_riset1	6.3E-03
1174	MLL5	55904	A_24_P411863_riset1	6.3E-03
1175	AF038184	-	A_24_P566831_riset1	6.3E-03
1176	H22954	-	A_32_P165504_riset1	6.3E-03
1177	AK022086	-	A_24_P510047_riset1	6.3E-03
1178	CITED4	163732	A_32_P209230_riset1	6.3E-03

1179	NSUN5C	260294	A_23_P82412_riset1	6.3E-03
1180	FKBP9:FKBP 9L	11328;360132	MIL_PPPID399200338_riset1	6.4E-03
1181	LOC646301;L OC728417;LO C728728;LOC 729021	645984	A_24_P93720_riset1	6.4E-03
1182	GPR92	57121	A_23_P204375_riset1	6.4E-03
1183	LOC642441;L OC727820;LO C730256;LOC 730257	642413;644496	A_24_P321184_riset1	6.4E-03
1184	EPS8	2059	A_23_P136347_riset1	6.4E-03
1185	LOC646762	646762	A_24_P911310_riset1	6.5E-03
1186	JMJD3	23135	A_24_P942630_riset1	6.5E-03
1187	PFKL	5211	A_23_P29079_riset1	6.5E-03
1188	SPTB	6710	A_32_P134968_riset1	6.5E-03
1189	EIF2S1	1965	A_24_P356015_riset1	6.5E-03
1190	PTX3	5806	A_23_P121064_riset1	6.5E-03
1191	THC2375527	-	A_32_P110225_riset1	6.5E-03
1192	DGAT2	84649	A_24_P295791_riset1	6.6E-03
1193	C13ORF33	84935	A_23_P99515_riset1	6.6E-03
1194	ACAT1	38	A_23_P24515_riset1	6.6E-03
1195	MYBL1	4603	A_24_P367227_riset1	6.6E-03
1196	WFDC1	58189	A_23_P106617_riset1	6.6E-03
1197	KLHDC4	122773	A_23_P422766_riset1	6.6E-03
1198	MUC8	4590	MUC8_riset2_piqor	6.7E-03
1199	AKR1C1	1645	MIL_PPPID399806218_riset1	6.7E-03
1200	ADM	133	A_23_P127948_riset1	6.7E-03
1201	DGKA	1606	DGKA_riset2	6.7E-03
1202	KIAA1377	57562	A_32_P58614_riset1	6.7E-03
1203	NFATC1	4772	NFATC1_2_riset2	6.7E-03
1204	BRD2	6046	A_24_P307014_riset1	6.7E-03
1205	AF116651	-	A_23_P77192_riset1	6.8E-03
1206	PDCD7	10081	A_24_P159181_riset1	6.8E-03
1207	CLEC5A	23601	A_23_P71165_riset1	6.8E-03
1208	DSTN	11034	A_23_P408095_riset1	6.8E-03
1209	GLT25D2	23127	A_32_P86365_rev_riset1	6.8E-03
1210	GLT25D2	23127	A_32_P86365_rev_riset1	6.8E-03

-	•			
1211	ASB7	140460	A_23_P117743_riset1	6.8E-03
1212	GPR114	221188	A_23_P206290_riset1	6.8E-03
1213	INDO	3620	A_23_P112026_riset1	6.8E-03
1214	SHKBP1	92799	A_23_P130560_riset1	6.8E-03
1215	CLEC4C	170482	CLEC4C_riset2	6.9E-03
1216	SSH1	54434	A_23_P429560_riset1	6.9E-03
1217	SFRP1	6422	A_23_P10127_riset1	6.9E-03
1218	SAE1	10055	A_23_P16337_riset1	6.9E-03
1219	FASLG	356	A_23_P369815_riset1	6.9E-03
1220	PDS5B	23047	A_23_P48387_riset1	6.9E-03
1221	TM7SF3	51768	A_23_P47857_riset1	6.9E-03
1222	WNT5A	7474	A_32_P61903_riset1	6.9E-03
1223	IL4R	3566	IL4R_2_riset2	6.9E-03
1224	BEST1	7439	A_23_P104992_riset1	7.0E-03
1225	LOC643008	643008	A_32_P445010_riset1	7.0E-03
1226	LITAF	9516	A_23_P3532_riset1	7.1E-03
1227	TPR	7175	MIL_PPPID394453417_riset1	7.1E-03
1228	PBX3	5090	A_23_P71821_riset1	7.1E-03
1229	ACTA2	59	A_23_P150053_riset1	7.1E-03
1230	PREPL	9581	A_24_P943193_riset1	7.1E-03
1231	CNOT2	4848	CNOT2_riset2	7.1E-03
1232	AK001118	-	A_32_P145385_riset1	7.1E-03
1233	PITPNC1	26207	A_23_P84189_riset1	7.2E-03
1234	CASP3	836	CASP3_riset2	7.2E-03
1235	MIF	4282	A_23_P91619_riset1	7.2E-03
1236	C1QA	712	C1QA_riset2_piqor	7.2E-03
1237	C14ORF130	55148	A_23_P205393_riset1	7.3E-03
1238	CLSTN3	9746	A_23_P53724_riset1	7.3E-03
1239	BMPR2	659	MIL_PPPID400032861_riset1	7.3E-03
1240	C2ORF39	92749	A_23_P308722_riset1	7.3E-03
1241	PDCD5	9141	A_23_P50608_riset1	7.3E-03
1242	C15ORF42	90381	A_32_P109296_riset1	7.4E-03
1243	IER3	8870	A_23_P42257_riset1	7.4E-03
1244	HES1	3280	A_23_P17998_riset1	7.4E-03
1245	PIM1	5292	PIM1_riset2	7.4E-03

1246	RIMS3	9783	A_23_P319583_riset1	7.4E-03
1247	HDLBP	3069	MIL_PPPID397416151_riset1	7.5E-03
1248	A_24_P92411 8	-	A_24_P924118_riset1	7.5E-03
1249	RABGAP1	23637	A_24_P252575_riset1	7.6E-03
1250	STAT3	6774	A_23_P100790_riset1	7.6E-03
1251	CARD10	29775	A_23_P434890_riset1	7.6E-03
1252	FNDC5	252995	A_23_P420326_riset1	7.6E-03
1253	PIK3R1	5295	PIK3R1_riset2	7.6E-03
1254	IL5RA	3568	A_23_P500676_riset1	7.6E-03
1255	CPNE8	144402	A_24_P56240_riset1	7.6E-03
1256	SAA1	6288	MIL_PPPID399806220_riset1	7.6E-03
1257	PIR	8544	A_23_P137035_riset1	7.7E-03
1258	AK021824	-	A_32_P220233_riset1	7.7E-03
1259	CUEDC1	55917	A_23_P318420_riset1	7.7E-03
1260	NOTCH4	4855	A_23_P365614_riset1	7.8E-03
1261	RAB32	10981	A_24_P303480_riset1	7.8E-03
1262	OSBPL6	114880	A_23_P108823_riset1	7.9E-03
1263	CD33	945	A_24_P301655_riset1	7.9E-03
1264	AMMECR1	9949	A_32_P201773_riset1	7.9E-03
1265	ELF5	2001	A_23_P13465_riset1	7.9E-03
1266	GP9	2815	GP9_riset2	7.9E-03
1267	NFATC2IP	84901	NFATC2IP_riset2	7.9E-03
1268	NFAT5	10725	NFAT5_riset2	7.9E-03
1269	AF085913	-	A_24_P927166_riset1	7.9E-03
1270	DKFZP547E0 87;LOC23117 ;LOC440345; LOC440354;L OC595101;LO C641298;LOC 653786;LOC7 30099	91695	A_24_P365679_riset1	8.0E-03
1271	ITGA8	8516	ITGA8_riset2_piqor	8.0E-03
1272	BNIP3L	665	BNIP3L_riset2_piqor	8.0E-03
1273	THC2385437	-	A_32_P49054_riset1	8.0E-03
1274	DKFZP547E0 87;LOC23117 ;LOC440345; LOC653786	23117;283846;44034 5;653786	A_24_P290163_riset1	8.1E-03
1275	NOLA1	54433	A_23_P58280_riset1	8.1E-03

1305	T75585	-	A_24_P536974_riset1	8.7E-03
1304	MYBL1	4603	A_24_P367227_riset1	8.7E-03
1303	TNFRSF21	27242	A_23_P30666_riset1	8.7E-03
1302	APBB1IP	54518	A_23_P401700_riset1	8.7E-03
1301	CHCHD1	118487	A_32_P51082_rev_riset1	8.6E-03
1300	ADH6	130	A_24_P25550_riset1	8.6E-03
1299	RASSF4	83937	A_24_P295590_riset1	8.6E-03
1298	AKR1C1;AK R1C2	1645;1646	A_24_P220947_riset1	8.6E-03
1297	TRIM34;TRI M6-TRIM34	445372;53840	A_23_P124190_riset1	8.5E-03
1296	UMOD	7369	A_23_P158775_riset1	8.5E-03
1295	TRAF1	7185	TRAF1_riset2	8.5E-03
1294	NCOA1	8648	NCOA1_riset2_piqor	8.5E-03
1293	SMAD3	4088	A_23_P48936_riset1	8.5E-03
1292	IWS1	55677	A_23_P165566_riset1	8.5E-03
1291	IL1B	3553	IL1B_riset2_piqor	8.4E-03
1290	KANK2	25959	A_23_P50426_riset1	8.4E-03
1289	SLFN12	55106	A_23_P118532_riset1	8.4E-03
1288	NR4A1	3164	A_23_P128230_riset1	8.4E-03
1287	ITGB7	3695	ITGB7_riset2_piqor	8.3E-03
1286	C2ORF37	80067	A_23_P5481_riset1	8.3E-03
1285	SLC16A7	9194	A_32_P130630_riset1	8.3E-03
1284	PYHIN1	149628	A_23_P365834_riset1	8.3E-03
1283	FFAR2	2867	A_23_P397391_riset1	8.3E-03
1282	GNPTAB	79158	A_24_P281975_riset1	8.2E-03
1281	FUK	197258	A_23_P429461_riset1	8.2E-03
1280	FRZB	2487	FRZB_riset2_piqor	8.1E-03
1279	GK5	256356	A_24_P362805_riset1	8.1E-03
1278	ST3GAL6	10402	A_23_P250800_riset1	8.1E-03
1277	IL10	3586	A_23_P126735_riset1	8.1E-03

1310	APOM	55937	A_23_P42265_riset1	8.8E-03
1311	GPR123	84435	A_32_P232437_riset1	8.8E-03
1312	STAT4	6775	STAT4_riset2_piqor	8.8E-03
1313	B3GAT1	27087	A_23_P1833_riset1	8.9E-03
1314	SH3PXD2B	285590	A_32_P24585_riset1	8.9E-03
1315	TNFRSF9	3604	A_23_P51936_riset1	9.0E-03
1316	GRB2	2885	GRB2_riset2_piqor	9.0E-03
1317	CLIC3	9022	A_23_P254654_riset1	9.0E-03
1318	LYL1	4066	A_23_P5281_riset1	9.0E-03
1319	SLC11A1	6556	A_32_P436132_riset1	9.0E-03
1320	CREBL2	1389	A_24_P56194_riset1	9.1E-03
1321	IL17D	53342	IL17D_riset2	9.1E-03
1322	KIF5A	3798	A_24_P227375_riset1	9.1E-03
1323	OCLN;LOC64 7859	4950;647859	A_24_P102053_riset1	9.1E-03
1324	TRIM43;LOC 643445;LOC6 53192	129868;643445;6531 92	A_23_P17173_riset1	9.1E-03
1325	ENTPD1	953	MIL_PPPID394453405_riset1	9.1E-03
1326	PPIL6	285755	A_23_P111361_riset1	9.1E-03
1327	CCDC37	348807	A_23_P426153_riset1	9.1E-03
1328	JUP	3728	A_23_P501822_riset1	9.1E-03
1329	ZFPL1	7542	A_23_P98232_riset1	9.1E-03
1330	SNX4	8723	A_23_P72568_riset1	9.2E-03
1331	HMGB1	3146	A_23_P99980_riset1	9.2E-03
1332	APOL6	80830	A_24_P941167_riset1	9.2E-03
1333	COPS2	9318	COPS2_riset2	9.3E-03
1334	IL1RAP	3556	A_23_P336554_riset1	9.3E-03
1335	SNAP23	8773	A_23_P206177_riset1	9.3E-03
1336	HLA-DRA	3122	A_32_P87697_riset1	9.4E-03
1337	TAF2	6873	A_24_P385119_riset1	9.4E-03
1338	LOC10012948 4_as	100129484	A_32_P36905_riset1	9.4E-03
1339	MMP25	64386	MMP25_riset2	9.4E-03
1340	FARS2	10667	A_23_P33720_riset1	9.4E-03
1341	COPS6	10980	A_23_P8432_riset1	9.4E-03
1342	BTBD7	55727	A_24_P230808_riset1	9.4E-03
1343	HNRNPU	3192	A_32_P51894_riset1	9.4E-03

1344	DUSP18	150290	A_24_P83118_riset1	9.4E-03
1345	GZMA	3001	MIL_PPPID394308024_riset1	9.4E-03
1346	RUNDC2A;R UNDC2B;RU NDC2C	400509;440352;8412 7	A_32_P66020_riset1	9.5E-03
1347	RBBP9	10741	A_23_P257532_riset1	9.5E-03
1348	RENBP	5973	A_23_P137155_riset1	9.5E-03
1349	RAI16	64760	A_23_P157620_riset1	9.5E-03
1350	SLC9A10	285335	A_24_P24770_riset1	9.5E-03
1351	AK096134	-	A_24_P715602_riset1	9.5E-03
1352	DHRS13	147015	A_23_P66719_riset1	9.5E-03
1353	TEGT	7009	A_24_P355876_riset1	9.5E-03
1354	SEC23IP	11196	A_23_P202602_riset1	9.6E-03
1355	EIF2C3	192669	MIL_PPPID394307836_riset1	9.6E-03
1356	LARS2	23395	A_23_P212397_riset1	9.6E-03
1357	FLJ13412	-	A_32_P96188_riset2	9.6E-03
1358	SERPINC1	462	A_23_P114626_riset1	9.6E-03
1359	LTA4H	4048	MIL_PPPID402610596_riset2	9.6E-03
1360	CHEK1	1111	A_23_P116123_riset1	9.7E-03
1361	LOC201175	201175	A_23_P401626_riset1	9.7E-03
1362	USP24	23358	USP24_riset2	9.7E-03
1363	TIMP4	7079	A_23_P69208_riset1	9.7E-03
1364	PPFIBP1	8496	A_23_P47867_riset1	9.8E-03
1365	CNN3	1266	A_23_P138168_riset1	9.8E-03
1366	CCND2	894	A_24_P278747_riset1	9.8E-03
1367	IQCB1	9657	A_23_P84140_riset1	9.8E-03
1368	NEK1	4750	A_23_P124427_riset1	9.8E-03
1369	HCK	3055	HCK_riset2	9.9E-03
1370	FAM125B	89853	A_24_P941557_riset1	9.9E-03
1371	LONRF1	91694	A_32_P194032_riset1	9.9E-03
1372	KRT18	3875	A_23_P99320_riset1	9.9E-03
1373	TMEM126B	55863	A_23_P2124_riset1	9.9E-03
1374	PLB1;TDRD7	151056;23424	A_24_P110926_riset1	9.9E-03
1375	LYRM7	90624	A_32_P18159_riset1	1.0E-02
1376	FKBP15	23307	A_32_P224149_riset1	1.0E-02
1377	CES4	51716	A_23_P374892_riset1	1.0E-02

1378 PDE6H 5149 A\_23\_P64913\_riset1 1.0E-02

**Supplemental Table 4**. **List of probes with significant differential expression common to both** *training* and *test sets*. List of 174 probes common to both *training* and *test sets* identified to have significant differential expression by study groups following four-class analysis. Ranked on p values by Kruskal-Wallis test with adjustment for False Discovery Rate (FDR) at 1%.

Common gene list					
Training set Rank	Gene Name	EntrezGene ID	Probe ID	Test set Rank	
1	CD79B	974	A_23_P207201_riset1	12	
2	TCL1A	8115	A_23_P357717_riset1	1	
3	HS3ST1	9957	A_23_P121657_riset1	3	
4	TCL1A	8115	MIL_PPPID394307780_riset1	2	
5	SH2D1B	117157	A_32_P324533_riset1	352	
6	MS4A1	931	MIL_PPPID394453510_riset1	57	
7	TLR5	7100	A_23_P85903_riset1	97	
8	FCLR1	115350	A_32_P71876_riset1	52	
9	PNOC	5368	A_23_P253321_riset1	53	
10	SLC8A1	6546	A_32_P147078_riset1	736	
11	FCRL2	79368	A_23_P160751_riset1	43	
12	BLK	640	BLK_riset2	111	
13	PCDH9	5101	A_24_P187218_riset1	9	
14	CD200	4345	A_23_P121480_riset1	4	
15	THC2317432	-	A_32_P124728_riset1	10	
16	BCL11A	53335	A_24_P402588_riset1	251	
17	TSPAN3	10099	A_23_P14804_riset1	80	
18	CD79A	973	CD79A_riset2_piqor	29	
19	CASP5	838	CASP5_riset2	493	
20	FCRL5	83416	A_23_P201211_riset1	301	
21	IL1RL2	8808	A_23_P56604_riset1	930	
22	EBI2	1880	A_23_P25566_riset1	82	
23	BLNK	29760	A_24_P64344_riset1	20	
25	RNF24	11237	A_23_P120533_riset1	784	
26	DIMT1L	27292	A_23_P58529_riset1	494	
27	EPO	2056	A_23_P145664_riset1	807	
28	ZAK	51776	A_23_P318300_riset1	244	
29	CD40	958	A_23_P57036_riset1	205	
31	IGHM	3507	A_24_P417352_riset1	13	
33	SH2D1B	117157	A_32_P324533_riset1	329	
34	AKR1C3	8644	A_23_P138543_riset1	106	
35	CASD1	64921	A_24_P69379_riset1	163	

36	FCRLA	84824	A_23_P46037_riset1	56
37	BTLA	151888	MIL_PPPID399200354_riset1	28
39	CLCN5	1184	CLCN5_riset2	959
40	LHFPL2	10184	A_23_P255104_riset1	65
41	ARG1	383	A_23_P111321_riset1	360
42	ANXA3	306	A_23_P121716_riset1	231
43	HLA-DOA	3111	A_32_P356316_riset1	74
44	KLRF1	51348	A_32_P158966_riset1	815
45	CD22	933	CD22_riset2	121
47	PLXDC2	84898	A_32_P187518_rev_riset1	60
48	BCL7A	605	A_24_P203056_riset1	59
50	ADAMTS4	9507	A_23_P360754_riset1	5
54	HLA-DOB	3112	A_23_P30736_riset1	128
55	CD163	9332	A_23_P33723_riset1	637
56	FLJ32866	731424	MIL_PPPID400032869_riset1	437
57	EBF1	1879	A_24_P156501_riset1	102
58	GPR92	57121	A_23_P204375_riset1	1182
60	PEX3	8504	A_23_P259328_riset1	413
62	CD83	9308	A_23_P70670_riset1	123
63	GPR120	338557	A_24_P129588_riset1	833
66	ASPH	444	A_24_P295245_riset1	214
67	MCTP1	79772	A_24_P212481_riset1	19
68	SORT1	6272	A_24_P325520_riset1	83
70	TMEM49	81671	A_32_P9753_riset1	58
71	MBOAT2	129642	A_23_P370635_riset1	110
75	SIRPA	140885	A_24_P267619_riset1	778
76	PDHX	8050	A_23_P36266_riset1	196
77	STAT3	6774	A_23_P100790_riset1	1250
78	SLPI	6590	A_23_P91230_riset1	389
81	RET	5979	MIL_PPPID397416187_riset1	1074
82	GPR84	53831	A_23_P25155_riset1	125
83	ITK	3702	ITK_riset2	99
84	AIM2	9447	A_32_P44394_riset1	218
87	TNFAIP8	25816	TNFAIP8_riset2	132
91	KCNJ2	3759	A_23_P329261_riset1	112
92	BNIP3	664	A_23_P138635_riset1	85
93	GALNT14	79623	A_23_P67847_riset1	333
94	TGDS	23483	A_23_P65217_riset1	78
96	DNAJC19	131118	A_23_P121396_riset1	638
100	THC2380706	-	A_24_P214556_riset1	714
101	C1ORF19	116461	A_23_P104022_riset1	891
103	LITAF	9516	A_23_P3532_riset1	1226
106	SLC25A37	51312	A_32_P197026_riset1	504
108	EDG1	1901	A_23_P160117_riset1	109

110	TNFAIP6	7130	A_23_P165624_riset1	496
112	TMTC3	160418	A_24_P944222_riset1	331
113	MNAT1	4331	A_23_P32615_riset1	541
114	ZNF181	339318	A_23_P50735_riset1	770
115	MYC	4609	MIL_PPPID404158649_riset2	1072
116	CLEC5A	23601	A_23_P71165_riset1	607
117	GPX7	2882	A_23_P73972_riset1	274
119	PPIL3	53938	A_23_P28213_riset1	131
120	THUMPD1	55623	A_24_P90878_riset1	317
121	MAD2L1	4085	A_23_P92441_riset1	300
122	SPTLC2	9517	A_24_P150486_riset1	66
123	THAP2	83591	A_24_P350437_riset1	310
125	C8ORF60	619426	A_24_P59387_riset1	409
126	MXD1	4084	A_23_P408094_riset1	732
130	SEPT9	10801	A_23_P106973_riset1	248
131	PDCD6	10016	A_23_P218997_riset1	433
133	IL10RA	3587	A_24_P107303_riset1	266
134	MAGEH1	28986	A_23_P34144_riset1	98
136	SLC25A37	51312	A_32_P197026_riset1	119
137	CARD6	84674	A_23_P41854_riset1	926
138	ZFP2	80108	A_23_P133359_riset1	1075
139	PTMA	5757	A_32_P746413_riset1	392
140	BACE2	25825	A_23_P154875_riset1	735
141	CHST2	9435	CHST2_riset2_piqor	359
143	BCKDHB	594	A_24_P239664_riset1	335
144	MTX2	10651	A_23_P120335_riset1	716
148	CD7	924	A_23_P118862_riset1	804
149	ACOT2	10965	A_23_P3111_riset1	577
153	CD40LG	959	A_23_P62220_riset1	275
155	FANK1	92565	A_23_P115785_riset1	48
156	DNMT1	1786	A_23_P27490_riset1	240
157	AK3L1	205	MIL_PPPID394453462_riset1	1122
158	RFC4	5984	A_23_P18196_riset1	87
159	BTG1	694	A_23_P87560_riset1	17
160	SPON1	10418	A_32_P133072_riset1	103
162	ATL3	25923	A_23_P105028_riset1	51
165	AFF3	3899	A_23_P373464_riset1	690
166	MCEE	84693	A_23_P56654_riset1	1013
167	NLRC4	58484	A_23_P119835_riset1	779
169	DTX1	1840	A_24_P290751_riset1	115
170	TRIM4	89122	A_23_P500601_riset1	227
171	TMEM106B	54664	A_32_P353072_riset1	293
176	FCAR	2204	A_24_P348265_riset1	241
178	VCPIP1	80124	A_32_P74366_riset1	509

179	SATB1	6304	SATB1_riset2	338
181	PDLIM7	9260	A_24_P41882_riset1	162
184	IL23A	51561	A_23_P76078_riset1	152
187	XBP1	7494	A_23_P120845_riset1	443
188	SOCS3	9021	A_23_P207058_riset1	831
189	SFRS10	6434	A_24_P145911_riset1	209
190	TNFSF10	8743	A_23_P121253_riset1	1029
195	RNASE2	6036	A_23_P151638_riset1	178
196	MAP2K6	5608	A_23_P207445_riset1	1048
198	LYRM7	90624	A_32_P18159_riset1	1375
199	AK124263	-	A_24_P538708_riset1	911
200	MYT1;PCMTD2	4661;55251	A_23_P210829_riset1	995
201	CD96	10225	A_23_P44154_riset1	533
203	PCGF6	84108	A_23_P115703_riset1	454
204	IGKV3-20	28912	A_23_P21800_riset1	11
205	CARD11	84433	A_23_P82324_riset1	502
206	IFT80	57560	A_23_P316150_riset1	375
207	SLAMF1	6504	SLAMF1_riset2	62
208	SIP1	8487	A_23_P88194_riset1	516
209	FAIM	55179	A_23_P253932_riset1	590
210	NEK1	4750	A_23_P124427_riset1	1368
211	IL1R2	7850	A_23_P79398_riset1	545
212	HOXB2	3212	A_23_P107283_riset1	142
214	FLT3	2322	MIL_PPPID394308044_riset1	345
216	SLC26A8	116369	A_23_P30950_riset1	264
219	FCGR1A	2209	A_23_P63395_riset1	318
220	LGALS8	3964	LGALS8_riset2	1102
222	CLIC3	9022	A_23_P254654_riset1	1317
223	BEX4	56271	A_23_P114391_riset1	176
224	SLC11A1	6556	A_32_P436132_riset1	1086
225	BMP2K	55589	A_24_P86240_riset1	27
226	SFT2D3	84826	A_23_P5566_riset1	370
227	C5ORF28	64417	A_23_P121875_riset1	400
230	PHLDB2	90102	A_24_P240166_riset1	1092
231	A_23_P399604	=	A_23_P399604_riset1	401
232	GTL3	29105	A_23_P3514_riset1	616
233	ITSN2	50618	MIL_PPPID399200362_riset1	733
234	ARHGEF12	23365	A_24_P175783_riset1	546
236	MUC8	4590	MUC8_riset2_piqor	1198
238	FLJ22662	79887	A_23_P87709_riset1	267
239	APEX1	328	A_23_P151649_riset1	585
240	RPS4Y1	6192	A_23_P259314_riset1	1132
241	LCK	3932	LCK_riset2	207
242	LOC642897	642897	A_24_P84401_riset1	933

244	SLC26A8	116369	A_23_P30950_riset1	161
246	CD247	919	A_23_P34676_riset1	16
247	UPF3A	65110	A_32_P202778_riset1	282
248	RGS1	5996	A_23_P97141_riset1	22
249	RBM3	5935	RBM3_riset2	619
250	POLR3H	171568	A_24_P322847_riset1	744
251	RHOH	399	A_23_P58132_riset1	49
254	LETMD1	25875	A_23_P117037_riset1	137
257	LDHB	3945	A_23_P53476_riset1	77
259	TRA@	6955	A_23_P258504_riset1	312

**Supplemental Table 5**. **Median of log-fold change in expression of top 11 ranked probes with significant differential expression in patient groups of the** *training set***. Median of log-fold change in expression (relative to median of all samples) of differentially expressed probes detected in patient groups of the** *training set***, ranked on 1% FDR. Plots showing the fold expression for each patient group of the** *training* **and** *test sets***, for all genes detected to be significantly differentially expressed available in online material. Stable; combined groups s-CNI, s-nCNI, s-LP.** 

Rank	Probe	Entrez Gene ID	Riset Probe ID	НС	Tol-DF	Stable	CR
1	CD79B	974	A_23_P207201_riset1	1.024	0.618	-0.2375	-0.319
2	TCL1A	8115	A_23_P357717_riset1	1.6525	1.062	-0.41	0.0965
3	HS3ST1	9957	A_23_P121657_riset1	1.161	0.995	-0.8895	-1.8945
4	TCL1A	8115	MIL_PPPID394307780_riset1	1.645	0.994	-0.38	0.121
5	SH2D1B	117157	A_32_P324533_riset1	1.085	0.76	-0.198	-0.0445
6	MS4A1	931	MIL_PPPID394453510_riset1	0.9025	0.763	-0.2725	-0.108
7	TLR5	7100	A_23_P85903_riset1	-0.7895	-0.341	0.1265	0.36
8	FCRL1	115350	A_32_P71876_riset1	1.1145	0.517	-1.2275	-0.9745
9	PNOC	5368	A_23_P253321_riset1	0.633	0.585	-0.2725	0.0465
10	SLC8A1	6546	A_32_P147078_riset1	-0.591	-0.451	0.04	0.4665
11	FCRL2	79368	A_23_P160751_riset1	-0.845	-0.9725	1.067	0.554

Supplemental Table 6. Annotation enrichment of genes with significant differential expression common to the *training* and *test sets*. Listed genes are those with significant differential expression which are common to both the training and test sets, and identified to be significantly associated with the listed annotated pathways. Shaded columns indicate B cell related pathways.

Annotation	B cell	IG domain	activated T cell	Phosphorylation of CD3 and TCR zeta chains	Generation of second messenger molecules	protein-tyrosine kinase	TCR signalling	Downregulated by B-Cell- Receptor Pathway	Lymphocyte	Hematopoietic cell lineage	Chr 1q23
Significance	5.00E-06	9.50E-05	4.42E-04	6.90E-04	2.01E-03	1.17E-02	1.87E-02	2.59E-02	2.71E-02	2.96E-02	4.49E-02
Count	15	21	14	5	6	5	7	10	5	5	7
Name											
CD7	Х	Х	Х						Х	Х	
TNFSF10			X					X			
CD200	X	X	X								
RNASE2		X									
FCRL2		X									X
FCRL5	X	X									X
CD79B	X	X						X			
IGKV3-20		X									
HLA-DOB		X		X	X		X				
CD247			X	Х	X		X		X		
SH2D1B											X
TCL1A	Х										
ADAMTS4											X
CD96	Х	Х	X								
FCRLA		X									X
IL1RL2		X									
CD40	Х		X					Х			
CD40LG			X								
FCGR1A		Х	X							Х	
CD83	Х	X	X						X		
IL1R2		Х						Х		Х	
CARD11							X				
BTG1								X			

MAD2L1								X			
SIRPA		Х	Х								
FCAR	Х	Х	Х								
HLA-DOA		Х		Х	Х		Х				
AIM2											X
BLK				X	X	X	X				
CD22	Х	Х						X		Х	
CD79A	Х	X						Х	Х		
ITK					Х	Х	Х				
LCK				Х	X	X	X	X			
FLT3	Х	Х				X					
MS4A1	Х		Х						Х	Х	
RET						X					
BTLA	X	X	X								
MYC								X			
SLAMF1	X		Х								X