

Supplementary figure 1: *Nod2*- and *Rip2*-deficient mice showed enhanced susceptibility to DSS-induced colitis. Single-housed wild-type (SH-WT; black circles, n=5), SH-*Nod2*^{-/-} (gray circles, n=5) and SH-*Rip2*^{-/-} (blue circles, n=4) mice received *ad libitum* 2% DSS for 7 days followed by 7 days of regular water. **(A)** Survival and **(B)** changes in body weight were evaluated daily and compared to that in SH-WT animals. **(C)** Representative colonoscopy and paraffin-embedded transversal sections of SH-WT, SH-*Nod2*^{-/-} and SH-*Rip2*^{-/-} mice colons at day 14. **(D)** Colon length and **(E)** histological scoring were evaluated at day 14.

Supplementary Figure 2: Early enhanced IL-6-mediated response in DSS-treated *Nod2*-deficient mice. **(A)** Protein levels of IL-6 were determined at day 9 and 14 by specific ELISA. **(B)** Immunohistochemical detection of IL-6 (brown) on colonic sections of DSS-treated WT, *Nod2*^{-/-} and *Rip2*^{-/-} mutant mice. IL-6 signal is detected in DC-like cells (arrowhead) and in epithelial cells. Scale bar, 50 μ m. **(C)** Protein levels of Tnf- α were determined at day 9 and 14 by specific ELISA. **(D)** Relative colonic transcript levels of *Reg3 β* , *Reg3 γ* , *Spp1*, *Ptgs2*, *Il10*, *Mmp13*, *Tnf α* and *Il6* were determined by qRT-PCR analysis at day 0, 9 and 14. Mean \pm SEM, are shown. Asterisk, significant difference $P < 0.05$.

Supplementary Figure 3: Enhanced IL-6 secretion in DSS-treated *Rip2*-deficient mice failed to co-localize with either CD11b⁺, CD4⁺ or CD8a⁺ cells. Immunofluorescent stainings of IL-6 (green) and CD11b, CD4 or CD8a (red) on colonic sections of DSS-treated WT and *Rip2*^{-/-} mutant mice. Arrows refer to dendritic-like cells that express IL-6. E, lu and m refer to epithelial cells, lumen and muscularis mucosae respectively. Scale bar, 50 μ m.

Supplementary Figure 4: Colonic response to fecal dysbiosis from *Nod2* deficient mice. Wild-type animals were either single-housed (n=5) or co-housed at a 1:1 ratio with *Nod2*-deficient mice (n=5) on the same diet for a 4-week period. Microarray experiment was performed once on extracted RNAs from the colon of single-housed and co-housed WT animals **(A)** heat-map, **(B)** functional networking **(C)** and gene ontology of differentially expressed genes as determined by the Ingenuity pathway software. Significance is plotted as $-\log(p\text{-value})$. Only biological terms with a significant enrichment are displayed as determined by a $|z\text{-score}| < -2$.

Supplementary Figure 5: *Nod2*- and microbiota-independent IL-6 and Tnf- α secretion by the non-diseased colonic mucosa. **(A)** Relative colonic transcript levels of *Tnf α* and *Il6* in both wild-type and *Nod2*-deficient mice bred under SPF and GF conditions were determined by qRT-PCR analysis. Mean \pm SEM, are shown. Asterisk, significant difference $P < 0.05$.

Supplementary Figure 6: Enhanced morbidity and mortality of *Nod2*- and *Rip2*-deficient mice in an experimental model of colitis-associated colorectal cancer. Single-housed wild-type (SH-WT, black circles, n=10), SH-*Nod2*^{-/-} (grey circles, n=11) and SH-*Rip2*^{-/-} (blue circles, n=11) mice were treated with AOM (8 mg/kg). Five days later, mice received *ad libitum* 2% DSS in drinking water for 4 cycles of 5 days separated by 7-day period of regular water. **(A)** Disease activity index and **(B)** survival were monitored daily.

Supplementary Figure 7: Enhanced IL-6, but not TNF- α , secretion in co-housed wild-type mice at early (but not at later) stage of intestinal tumorigenesis in an

experimental model of colitis-associated colorectal cancer. Protein levels of Tnf- α and IL-6 were determined at day 9 and 34 by specific ELISA. Mean \pm SEM, are shown. Asterisk, significant difference $P < 0.05$.

Supplementary Figure 8: Gene-plus-dysbiosis interaction result in pathological IL-6-mediated response. Five days after AOM administration (at 12 mg/kg), mice were exposed to 4 cycles of DSS, including 7 days separated by 10-day period of regular water. A combination of antibiotics (Atb) was given (n=4 wild-type mice and n=3 *Nod2*^{-/-} mice) or not (n=3 wild-type mice and n=2 *Nod2*^{-/-} mice) to animals. **(A)** Venn-diagram analysis. **(B)** Gene ontology. Significance is plotted as -log(p-value). Only top three biological terms with a significant enrichment are displayed as determined by Ingenuity pathway analysis.

Supplementary Figure 9: Differential response to antibiotics treatment as a result of Nod2 deficiency. Transcript levels of *Reg3 β* , *Reg3 γ* , *Spp1*, *Il6*, *Ptgs2*, *Tnf α* , *Il17a*, *Il17f* and *Il22* were determined by qRT-PCR analysis in colons from *Nod2*^{+/+} (black circles, n=4), *Nod2*^{-/-} (gray circles, n=3), Atb-treated WT (black circles with green border, n=4) and Atb-treated *Nod2*^{-/-} (gray circles with green border, n=3) at day 16. Mean \pm SEM, are shown.

Supplementary Figure 10: Anti-IL6R treatment influences Nod2-driven dysbiosis in the DSS-AOM model. High-throughput 16S rRNA pyrosequencing was performed on chronically inflamed **(A)** and tumoral **(B)** colonic specimens isolated from *Nod2*^{+/+} and *Nod2*^{-/-} animals (N=4). Clusters representing 20 OTUs which primarily contribute to the shift between *Nod2*^{+/+} and *Nod2*^{-/-} animals were depicted. Corresponding clusters (left and right) are created based on the same OTUs. Z-score normalized OTU abundances

are color-coded. Row dendrograms display OTU abundance similarities while column dendrograms display similarities between animals (dark green for *Nod2*^{+/+}, light green for *Nod2*^{-/-}). Column headers represent animal IDs, which are unique within a given group.

Supplementary Figure 11: Fecal-associated dysbiosis in *Nod2*-deficient mice is mitigated by reciprocal fecal transplantation. High-throughput 16S rRNA pyrosequencing was performed on fecal specimens isolated from all gnotobiotic animals upon injury (N=5). **(A)** Non parametric quantification of microbiota diversity. *P*-values were determined by the Mann-Whitney U-test. Mean ± SEM, are shown. Asterisk, significant difference *P*<0.05. **(B)** Percentage abundance at the phyla level. **(C)** Clusters representing 20 OTUs which primarily contribute to the shift between the fecal-associated microbiota were depicted (N=5). Corresponding clusters (left and right) are created based on the same OTUs. Z-score normalized OTU abundances are color-coded. Row dendrograms display OTU abundance similarities while column dendrograms display similarities between animals (dark green for *Nod2*^{+/+}, light green for *Nod2*^{-/-}). Column headers represent animal IDs, which are unique within a given group.

Supplementary Figure 12: Mucosal-associated dysbiosis in *Nod2*-deficient mice is mitigated by reciprocal fecal transplantation. High-throughput 16S rRNA pyrosequencing was performed on colonic specimens isolated from all gnotobiotic animals upon injury (N=5). **(A)** Non parametric quantification of microbiota diversity. *P*-values were determined by the Mann-Whitney U-test. Mean ± SEM, are shown. Asterisk, significant difference *P*<0.05. **(B)** Percentage abundance at the phyla level. **(C)** Clusters representing 20 OTUs which primarily contribute to the shift between the

mucosal-associated microbiota were depicted. Corresponding clusters (left and right) are created based on the same OTUs. Z-score normalized OTU abundances are color-coded. Row dendrograms display OTU abundance similarities while column dendrograms display similarities between animals (dark green for *Nod2*^{+/+}, light green for *Nod2*^{-/-}). Column headers represent animal IDs, which are unique within a given group.

Supplementary Table 1 : Microarray analysis on co-housed wild-type animals.

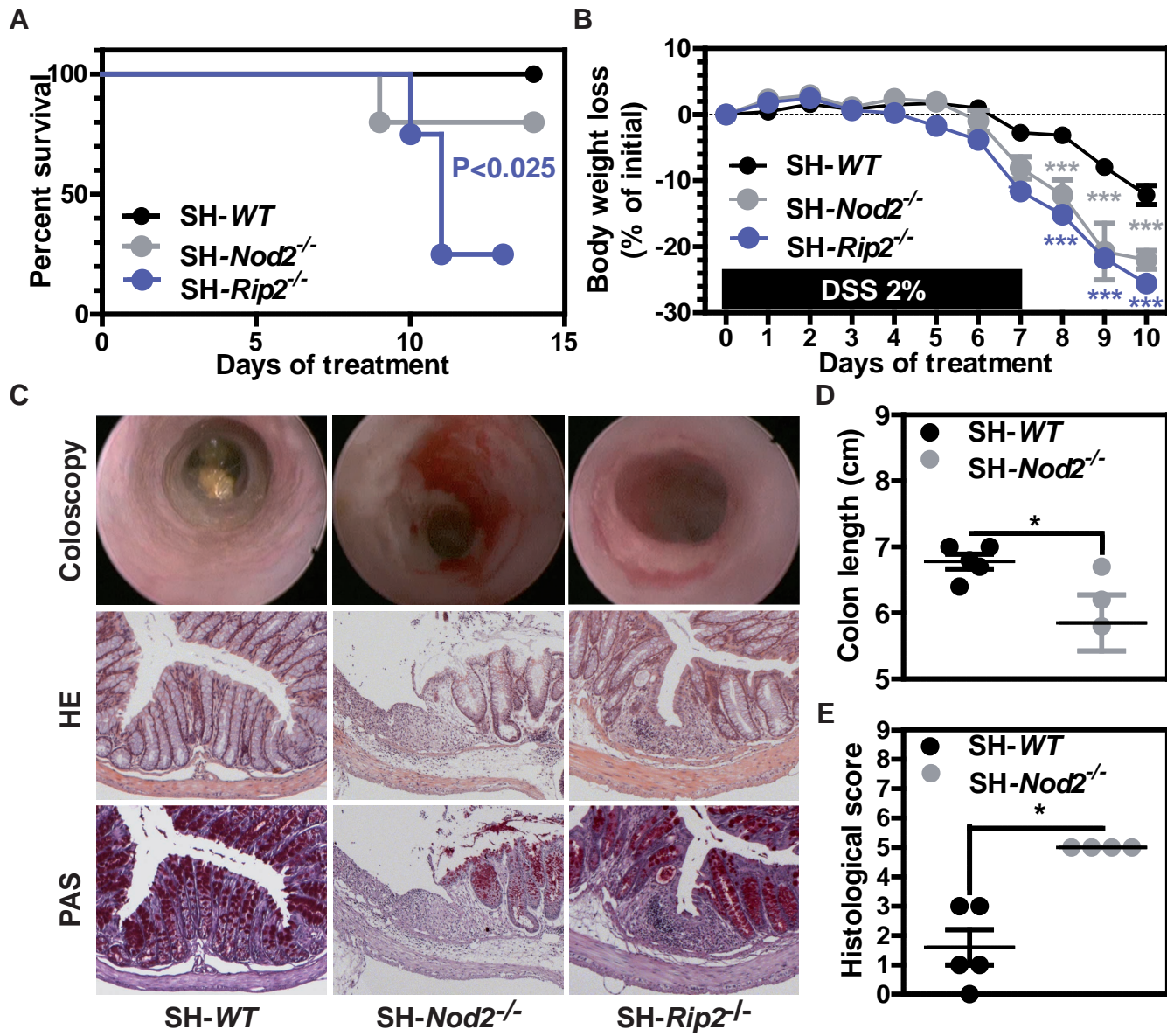
Differentially expressed genes with a *p*-value < 0.01 and an average fold change > 1 were listed.

Supplementary Table 2 : Gene ontology analysis on differentially expressed genes upon co-housing. Function annotation was performed by using the Ingenuity pathway software. Regulation z-score predict function activation state.

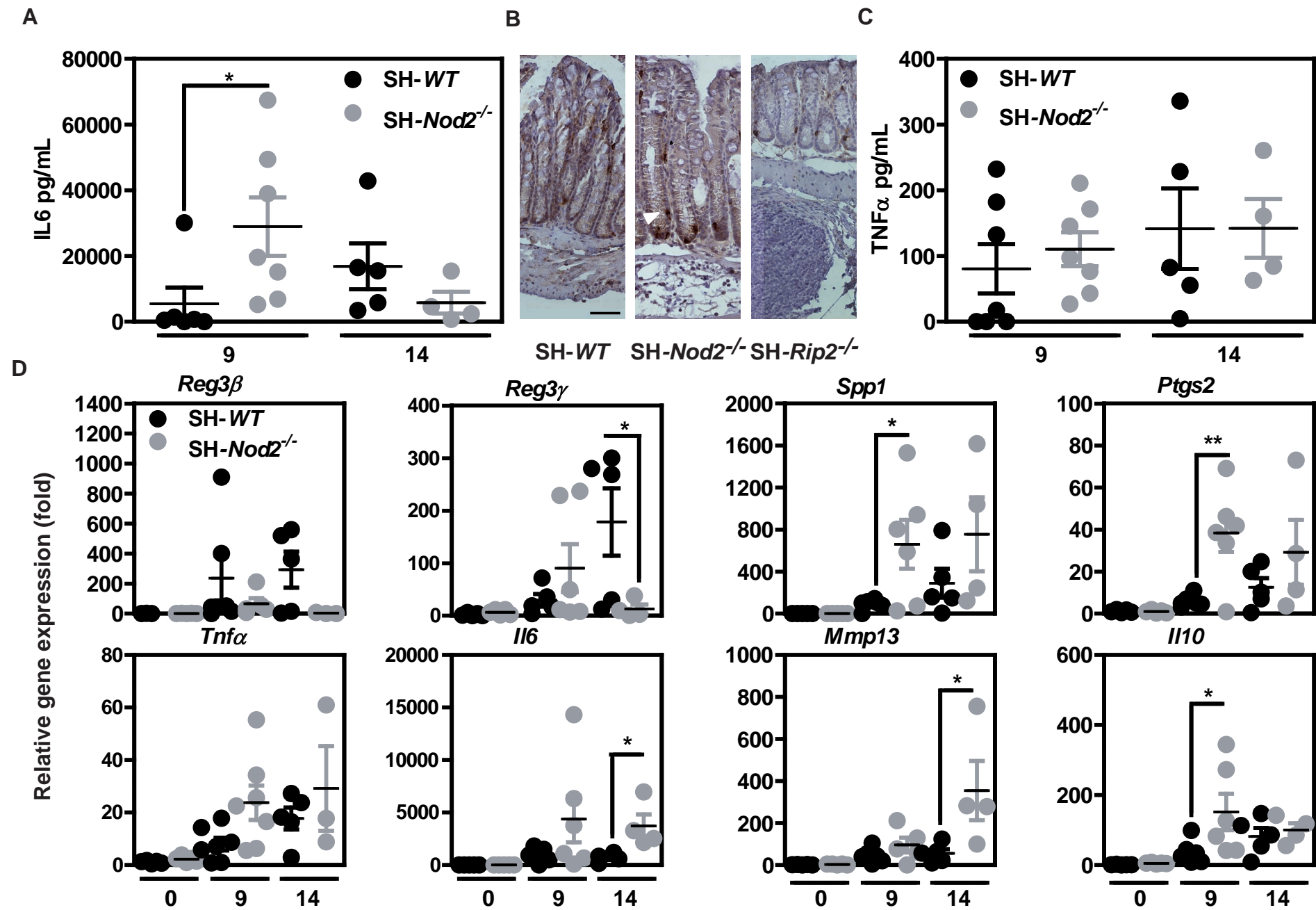
Supplementary Table 3 : Microarray analysis in DSS/AOM-treated wild-type and *Nod2*-deficient mice according antibiotic treatment. First and second group described differential responsiveness of wild-type and *Nod2*-deficient mice to antibiotic treatment when compared to untreated wild-type and *Nod2*-deficient animals respectively.

Supplementary Table 4 : Gene ontology analysis on the differential *Nod2*-dependent response to antibiotics treatment. Function annotation was performed by using the Ingenuity pathway software.

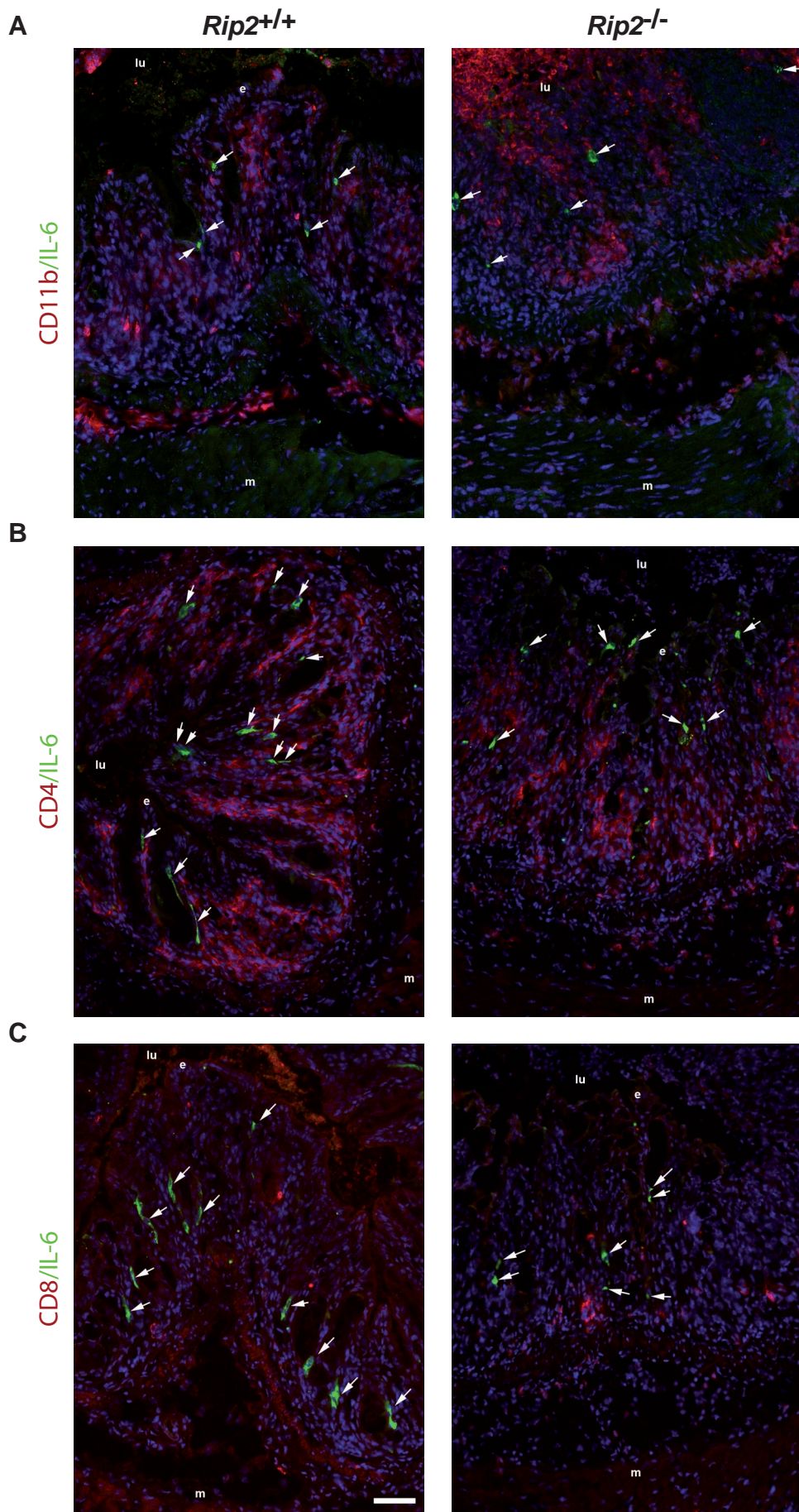
Supplementary Table 5 : Primers sequences for qRT-PCR and qPCR analysis



Supplementary figure 1

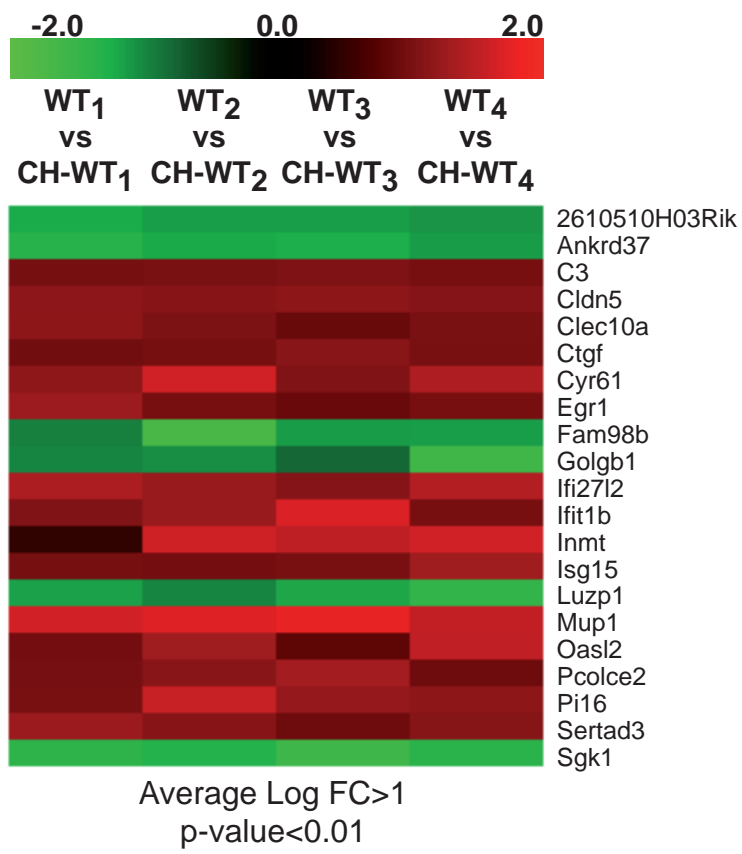


Supplementary figure 2

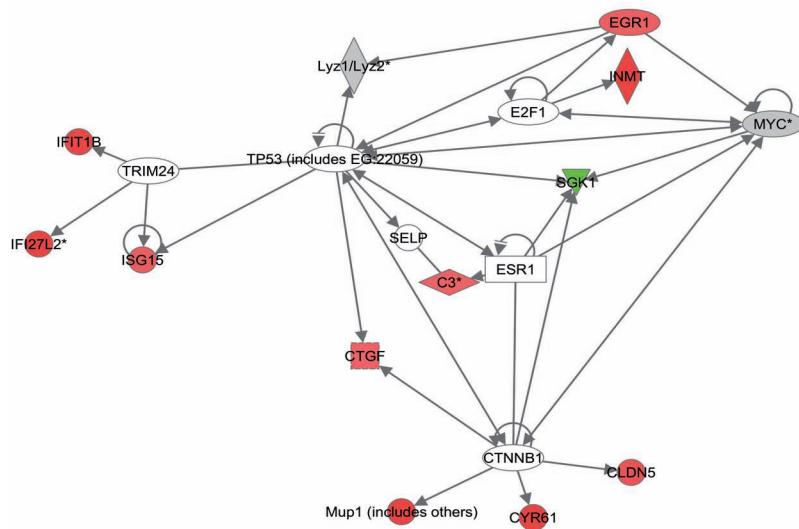


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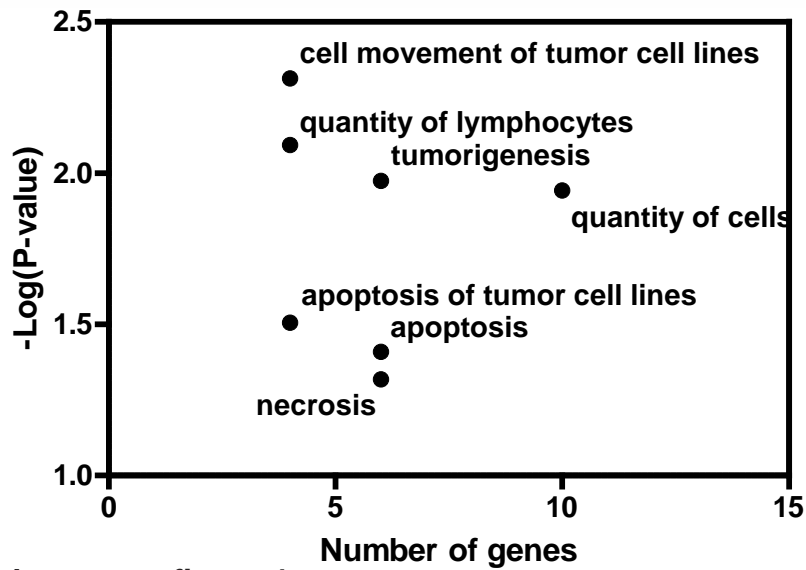
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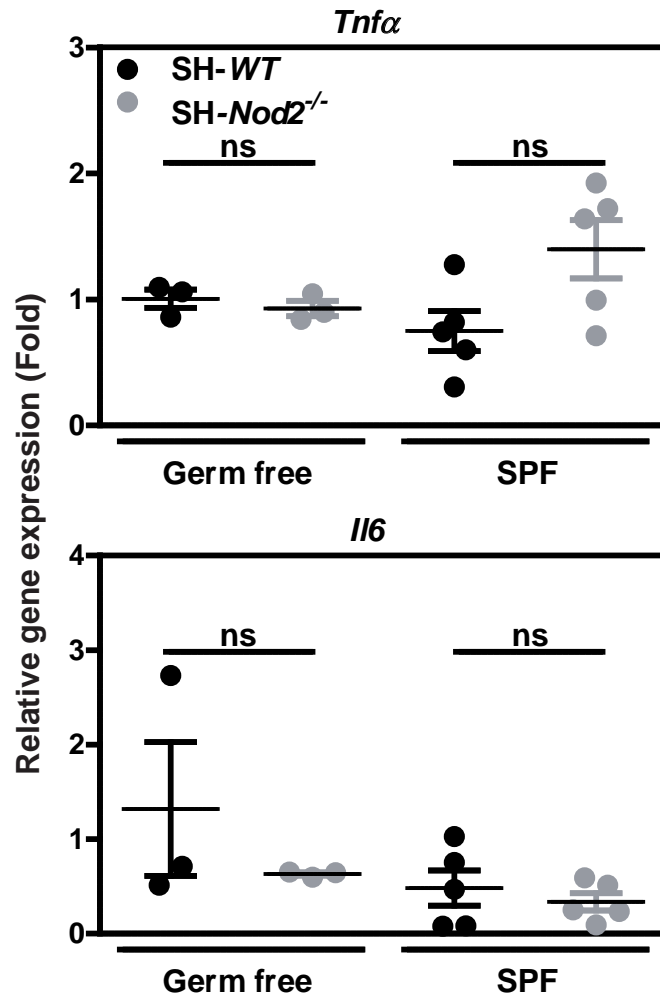
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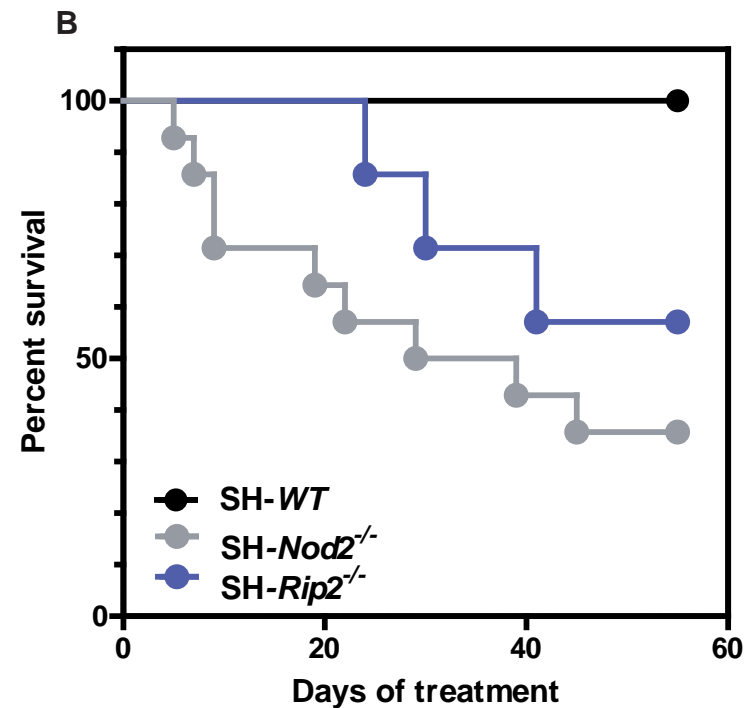
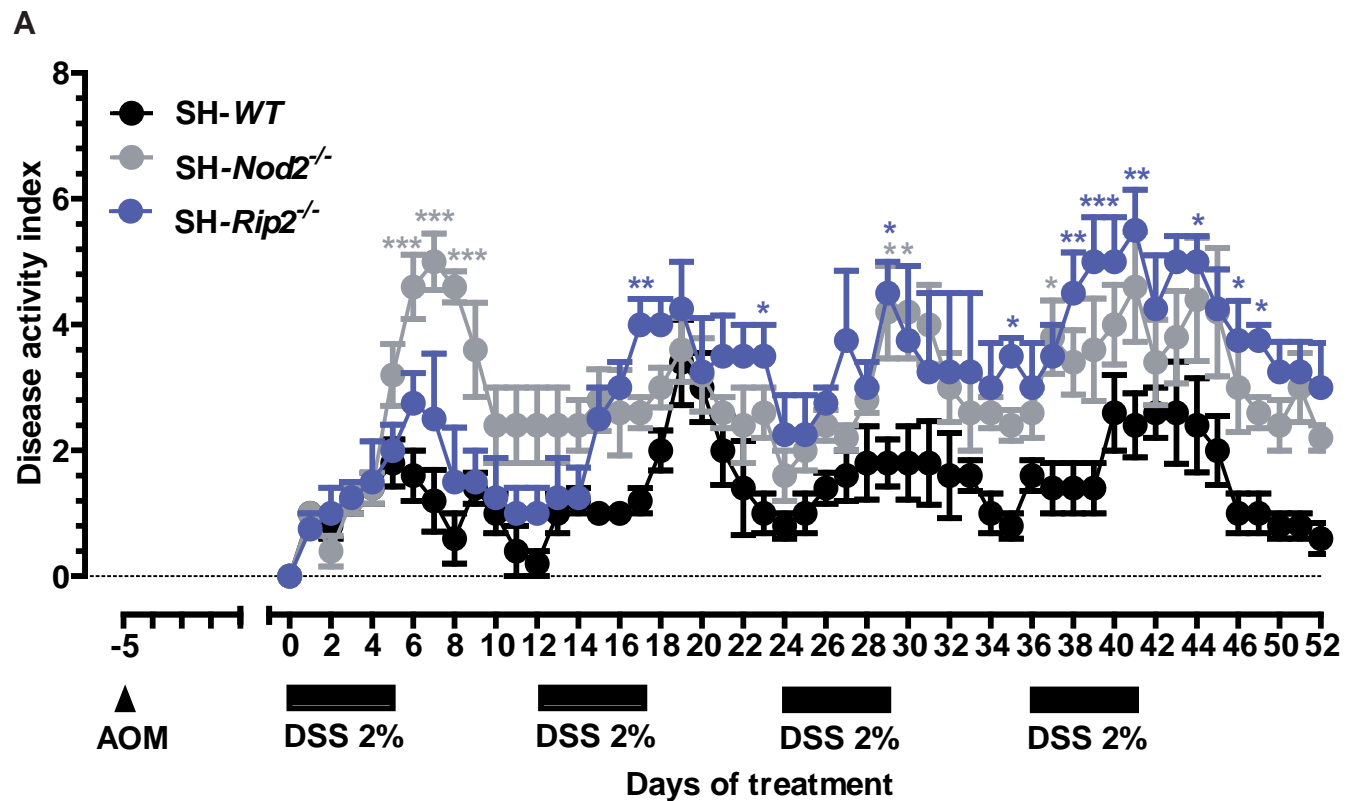
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Supplementary figure 4

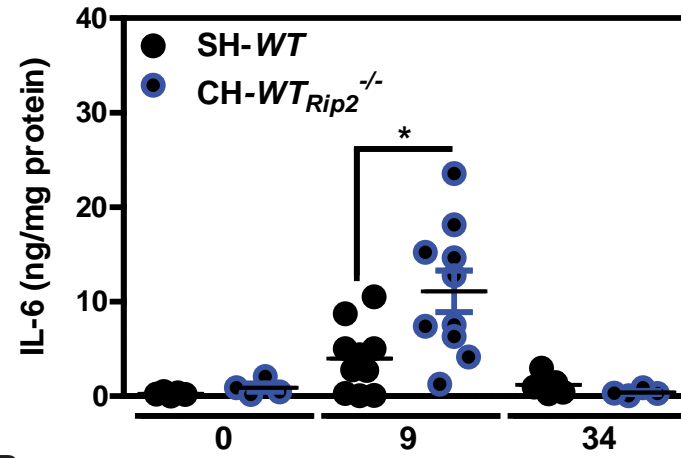


Supplementary figure 5

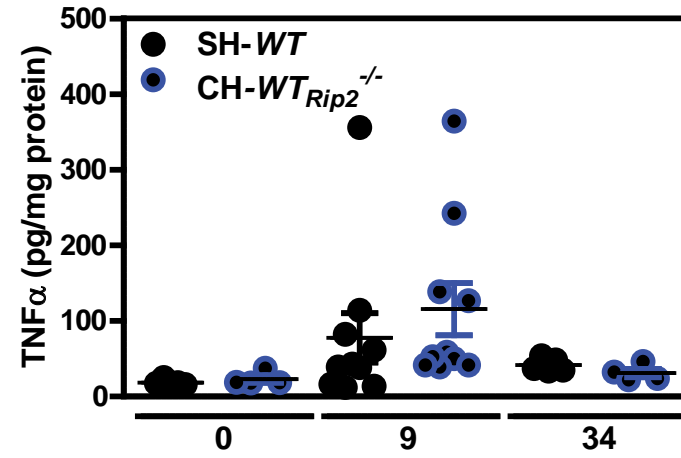


Supplementary figure 6

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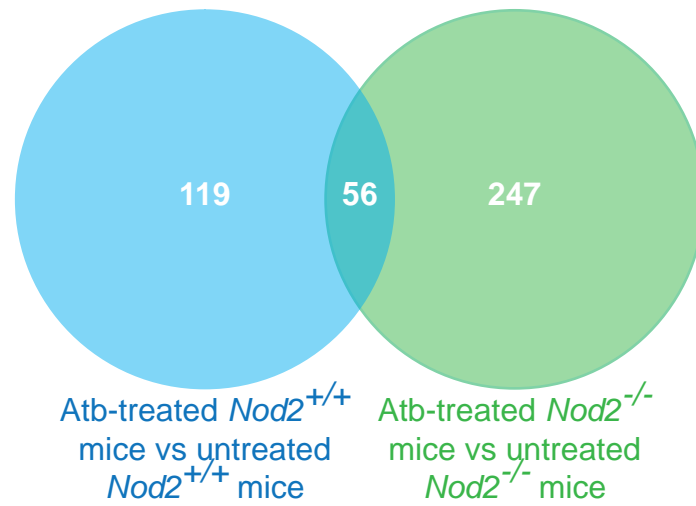


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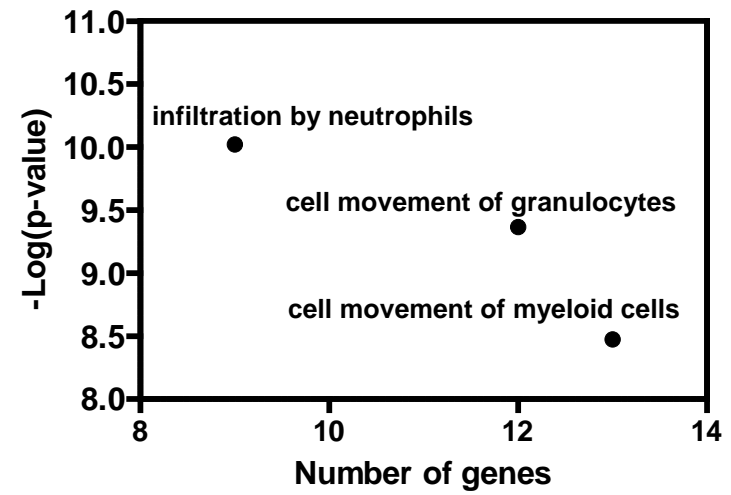
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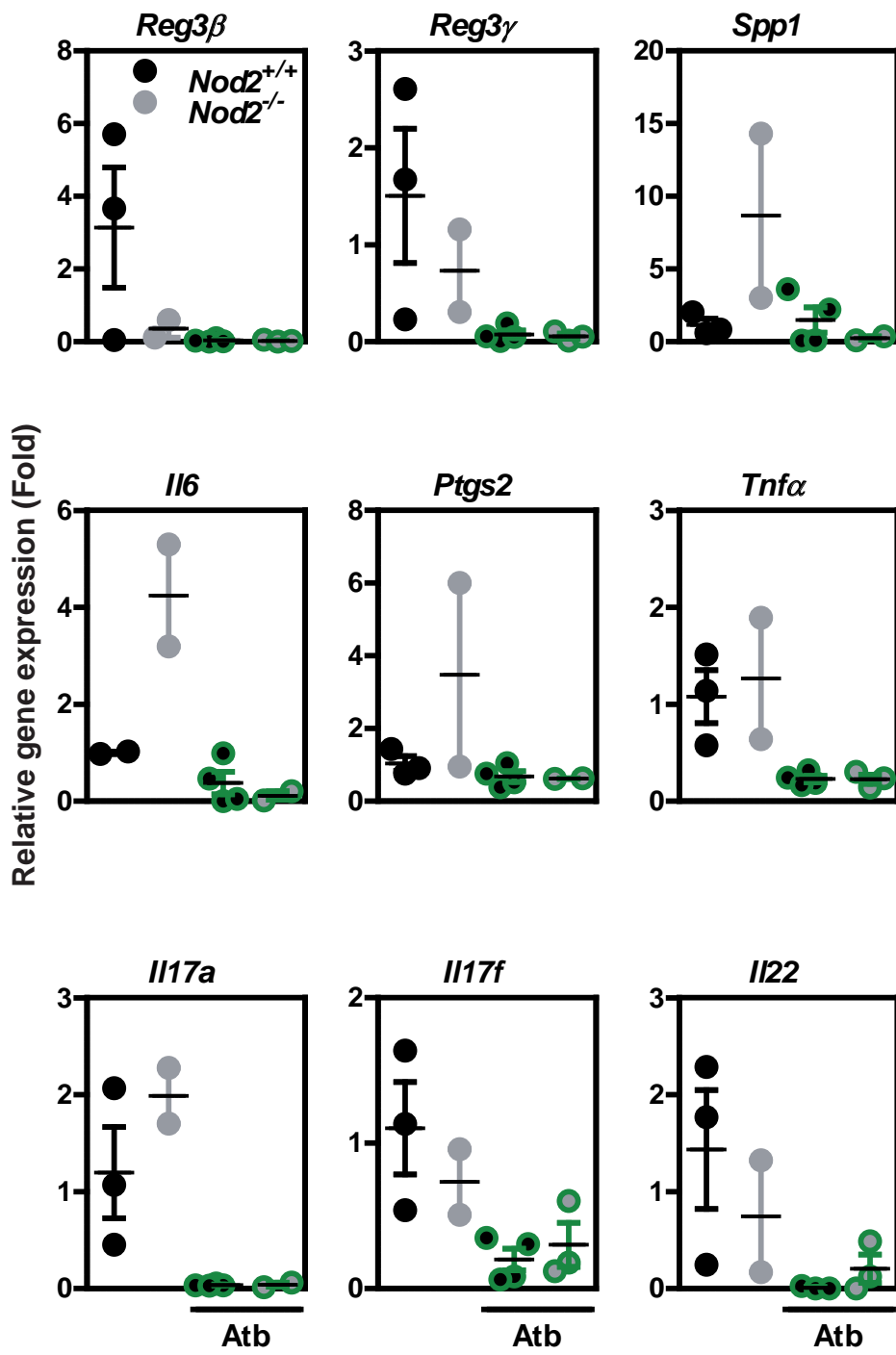
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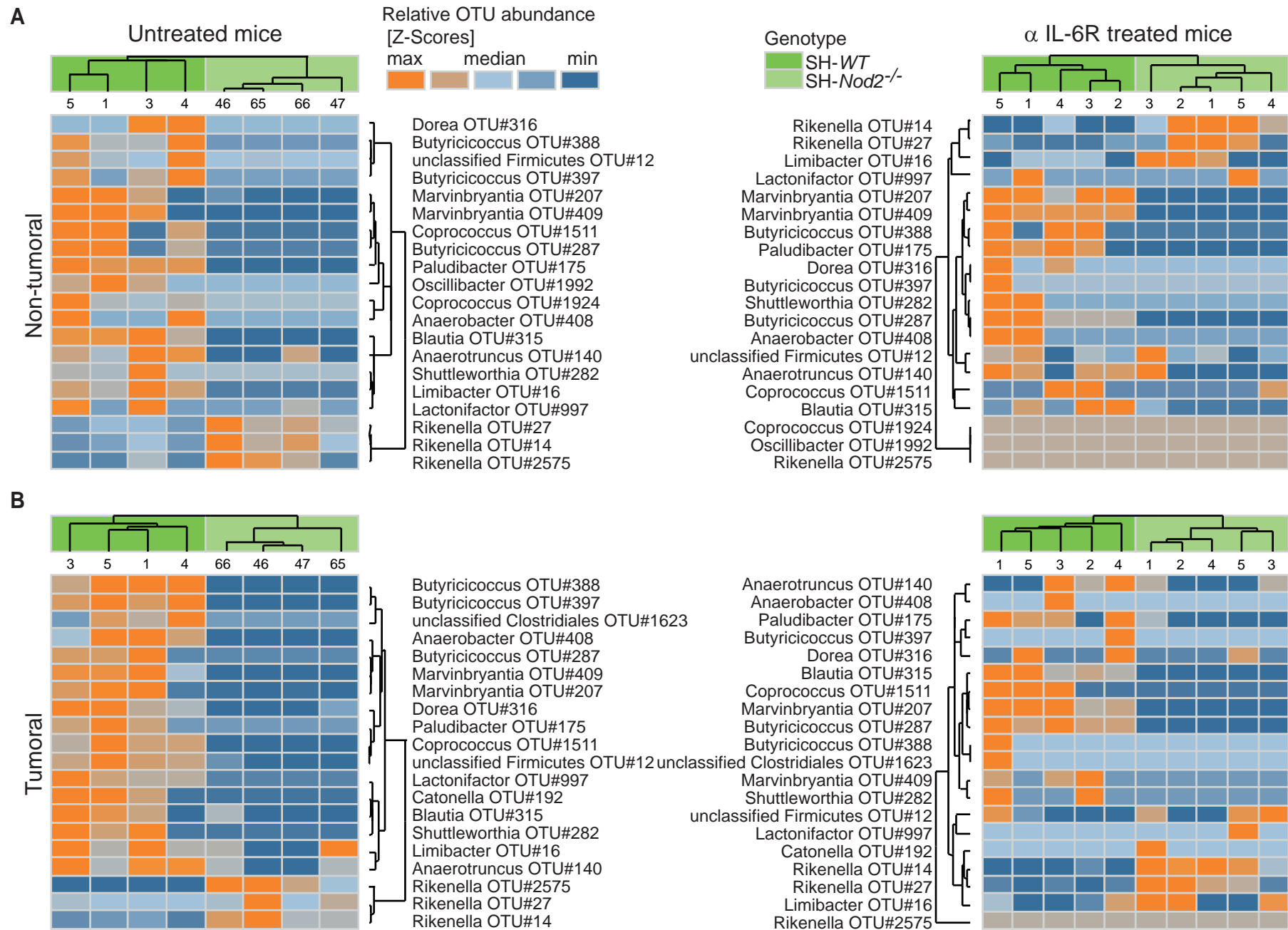
Supplementary figure 8

B



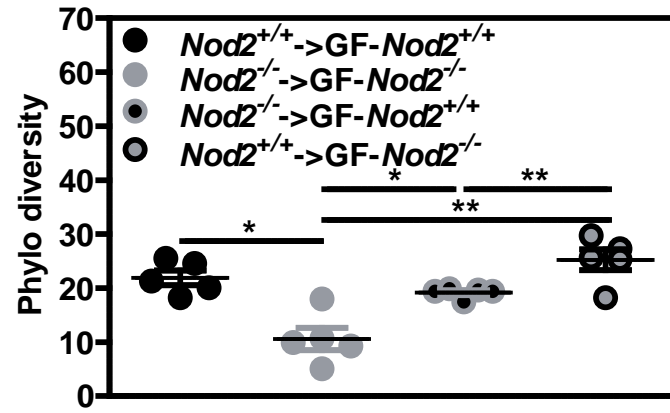


Supplementary Figure 9

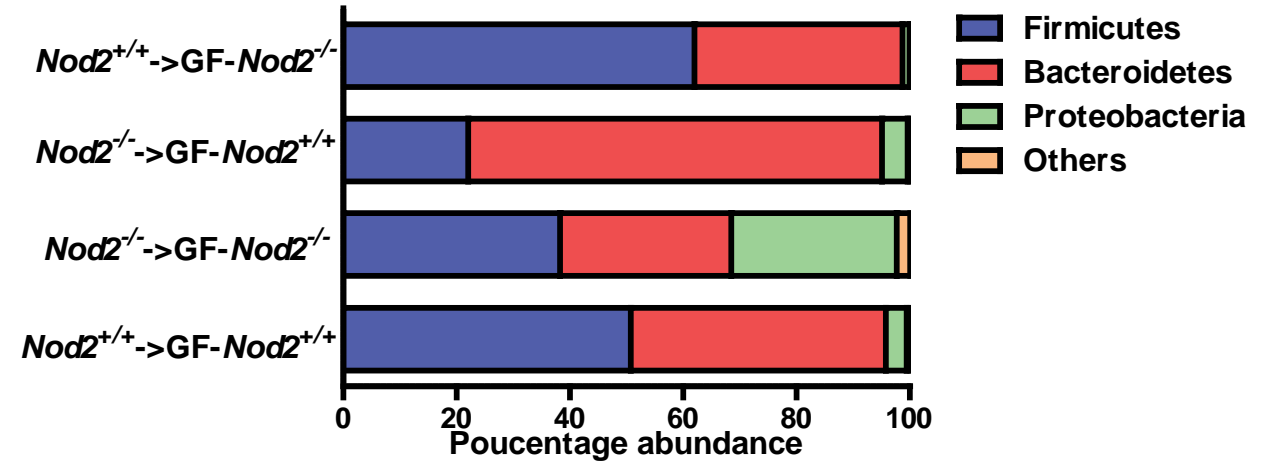


Supplementary figure 10

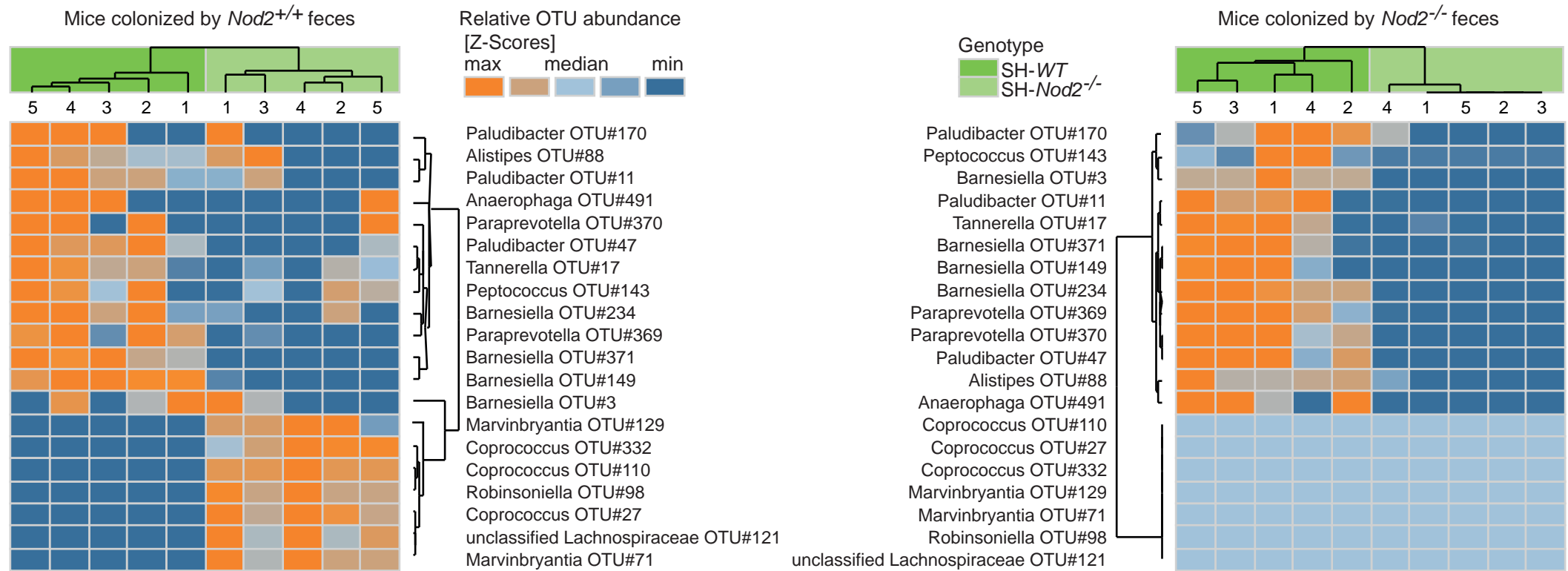
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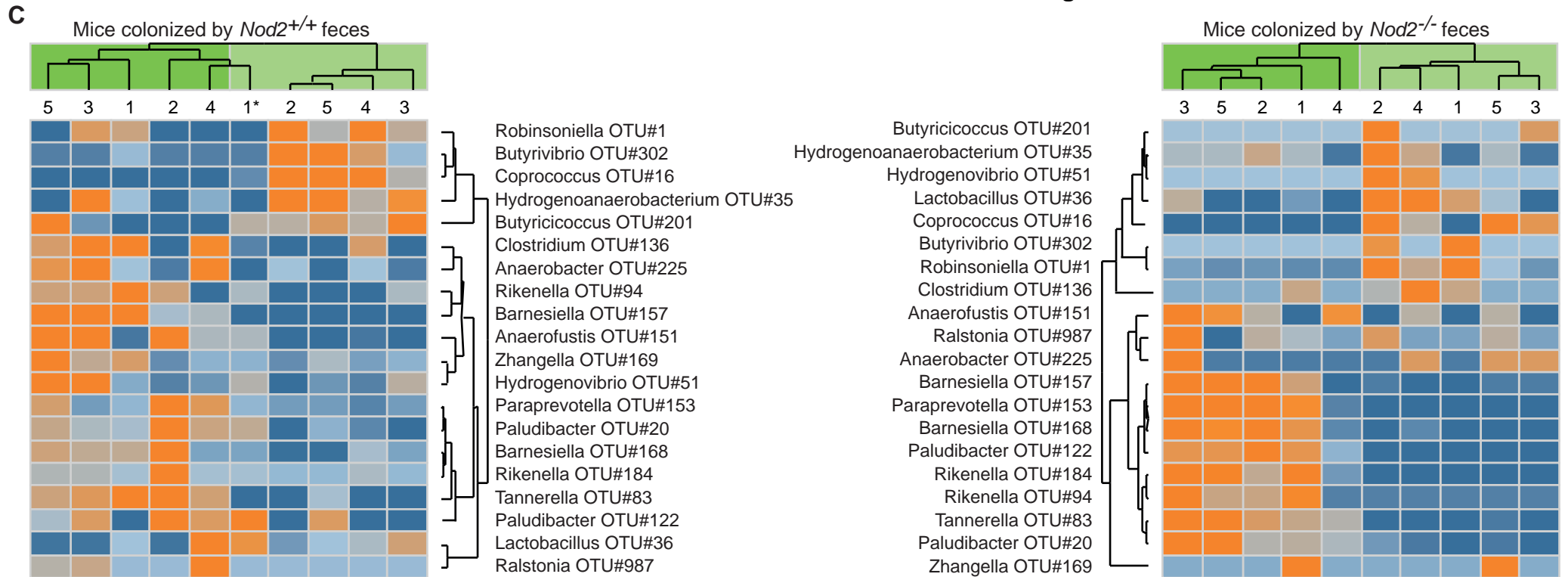
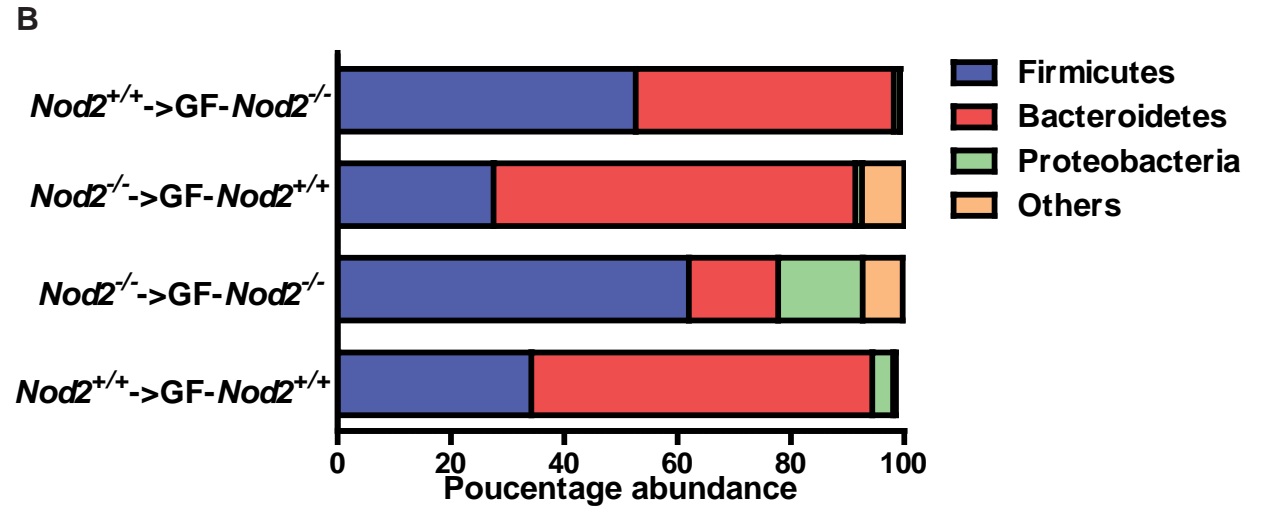
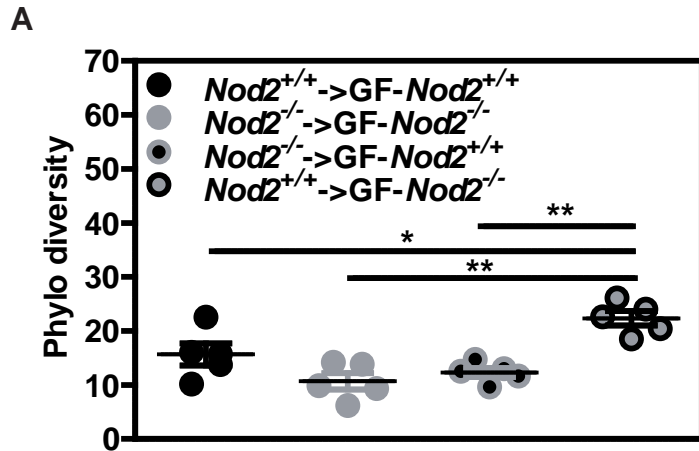
B



C



Supplementary figure 11



Supplementary figure 12

Supplementary Table 1: Microarray analysis on co-housed wild-type animals.

ID	Symbol	Entrez Gene Name	Log Ratio	p-value
A_51_P272066	2010109I03Rik	RIKEN cDNA 2010109I03 gene	-1,147	1,67E-06
A_52_P319438	ANKRD37	ankyrin repeat domain 37	-1,238	2,16E-06
A_51_P110301	C3	complement component 3	1,002	1,32E-06
A_51_P189814	CLDN5	claudin 5	1,131	1,53E-06
A_51_P141413	CLEC10A	C-type lectin domain family 10, member A	1,021	2,20E-04
A_51_P157042	CTGF	connective tissue growth factor	1,011	2,65E-06
A_51_P252859	CYR61	cysteine-rich, angiogenic inducer, 61	1,310	1,91E-05
A_51_P367866	EGR1	early growth response 1	1,040	2,55E-04
A_51_P202040	FAM98B	family with sequence similarity 98, member B	-1,225	1,94E-04
A_52_P675052	GOLGB1	golgin B1	-1,099	4,88E-04
A_52_P90363	IFI27L2	interferon, alpha-inducible protein 27-like 2	1,283	3,72E-06
A_51_P327751	IFIT1B	interferon-induced protein with tetratricopeptide repeats 1B	1,251	4,64E-04
A_51_P162162	INMT	indolethylamine N-methyltransferase	1,305	4,62E-03
A_52_P463936	ISG15	ISG15 ubiquitin-like modifier	1,052	2,55E-05
A_52_P359621	LUZP1	leucine zipper protein 1	-1,195	4,61E-06
A_51_P461703	Mup1	major urinary protein 1	1,663	5,24E-05
A_51_P387123	Oasl2	2'-5' oligoadenylate synthetase-like 2	1,143	1,00E-04
A_51_P245789	PCOLCE2	procollagen C-endopeptidase enhancer 2	1,085	1,50E-05
A_52_P413756	PI16	peptidase inhibitor 16	1,236	1,49E-04
A_52_P71105	SERTAD3	SERTA domain containing 3	1,096	4,79E-06
A_51_P118237	SGK1	serum/glucocorticoid regulated kinase 1	-1,414	1,12E-06

Supplementary Table 2 : Gene ontology analysis on differentially expressed genes upon co-housing

Category	Functions	Functions Annotation	p-Value	-log p-Value	Predicted Activation State	Activation z-score	Molecules	# Molecules
Cancer	tumorigenesis	tumorigenesis	1.14E-02	1.94309515		-1.414	C3,C3,LDN5,CLEC10A,CTGF,CYR61,EGR1,IFI272,IFIT1B,ISG15,SGK1	10
Cell Death	apoptosis	apoptosis of tumor cell lines	3.12E-02	1.50584541		-0.482	CTGF,CYR61,EGR1,SGK1	4
Cell Death	necrosis	necrosis	3.90E-02	1.40893539		-0.283	201010903Rik,C3,CTGF,CYR61,EGR1,SGK1	6
Cell Death	apoptosis	apoptosis	4.81E-02	1.31785492		0.065	201010903Rik,C3,CTGF,CYR61,EGR1,SGK1	6
Tissue Morphology	quantity	quantity of cells	1.06E-02	1.97469413		0.280	C3,CLEC10A,CTGF,EGR1,ISG15,SGK1	6
Hematological System Development and Function	quantity	quantity of lymphocytes	8.08E-03	2.09258864		1.154	C3,CLEC10A,EGR1,ISG15	4
Tissue Morphology	quantity	quantity of lymphocytes	8.08E-03	2.09258864		1.154	C3,CLEC10A,EGR1,ISG15	4
Cellular Movement	cell movement	cell movement of tumor cell lines	4.86E-03	2.31336373		1.951	C3,CTGF,CYR61,EGR1	4
Cellular Assembly and Organization	quantity	quantity of focal complexes	6.38E-06				CTGF,CYR61	2
Cell Morphology	abnormal morphology	abnormal morphology of neutrophils	2.97E-05				C3,EGR1	2
Hematological System Development and Function	abnormal morphology	abnormal morphology of neutrophils	2.97E-05				C3,EGR1	2
Inflammatory Response	abnormal morphology	abnormal morphology of neutrophils	2.97E-05				C3,EGR1	2
Cancer	pituitary gland adenoma	pituitary gland adenoma	3.58E-04				C3,EGR1,IFIT1B	3
Cellular Compromise	injury	injury of cells	3.96E-04				C3,EGR1	2
Renal and Urological Disease	proteinuria	proteinuria	4.07E-04				C3,CTGF,SGK1	3
Cellular Growth and Proliferation	colony formation	colony formation of carcinoma cell lines	5.18E-04				CYR61,EGR1	2
Digestive System Development and Function	regeneration	regeneration of liver	5.51E-04				C3,EGR1	2
Hepatic System Development and Function	regeneration	regeneration of liver	5.51E-04				C3,EGR1	2
Organ Morphology	regeneration	regeneration of liver	5.51E-04				C3,EGR1	2
Cancer	benign tumor	benign tumor	1.01E-03				C3,CTGF,CYR61,EGR1,IFIT1B	5
Hepatic System Development and Function	adhesion	adhesion of hepatic stellate cells	1.07E-03				CTGF	1
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of hepatic stellate cells	1.07E-03				CTGF	1
Connective Tissue Development and Function	adhesion	adhesion of hepatic stellate cells	1.07E-03				CTGF	1
Tissue Adhesion	adhesion	adhesion of hepatic stellate cells	1.07E-03				CTGF	1
Cardiovascular System Development and Function	angiogenesis	angiogenesis of growth plate	1.07E-03				CTGF	1
Connective Tissue Development and Function	angiogenesis	angiogenesis of growth plate	1.07E-03				CTGF	1
Embryonic Development	angiogenesis	angiogenesis of growth plate	1.07E-03				CTGF	1
Organ Development	angiogenesis	angiogenesis of growth plate	1.07E-03				CTGF	1
Organismal Development	angiogenesis	angiogenesis of growth plate	1.07E-03				CTGF	1
Skeletal and Muscular System Development and Function	angiogenesis	angiogenesis of growth plate	1.07E-03				CTGF	1
Tissue Development	angiogenesis	angiogenesis of growth plate	1.07E-03				CTGF	1
Cellular Response to Therapeutics	antiestrogen resistance	antiestrogen resistance of breast cancer cell lines	1.07E-03				CYR61	1
Drug Metabolism	antiestrogen resistance	antiestrogen resistance of breast cancer cell lines	1.07E-03				CYR61	1
Cell Death	cytotoxicity	cytotoxicity of hepatoma cell lines	1.07E-03				SGK1	1
Cancer	hyperplasia	delay in hyperplasia of hepatocytes	1.07E-03				C3	1
Gastrointestinal Disease	hyperplasia	delay in hyperplasia of hepatocytes	1.07E-03				C3	1
Hepatic System Disease	hyperplasia	delay in hyperplasia of hepatocytes	1.07E-03				C3	1
Tissue Morphology	removal	delay in removal of parenchyma	1.07E-03				C3	1
Cellular Movement	dissemination	dissemination of hepatoma cell lines	1.07E-03				CTGF	1
Connective Tissue Development and Function	endochondral ossification	endochondral ossification of growth plate	1.07E-03				CTGF	1
Embryonic Development	endochondral ossification	endochondral ossification of growth plate	1.07E-03				CTGF	1
Organ Development	endochondral ossification	endochondral ossification of growth plate	1.07E-03				CTGF	1
Organismal Development	endochondral ossification	endochondral ossification of growth plate	1.07E-03				CTGF	1
Skeletal and Muscular System Development and Function	endochondral ossification	endochondral ossification of growth plate	1.07E-03				CTGF	1
Tissue Development	endochondral ossification	endochondral ossification of growth plate	1.07E-03				CTGF	1
Hematological System Development and Function	erythropoiesis	erythropoiesis of splenocytes	1.07E-03				EGR1	1
Cellular Development	erythropoiesis	erythropoiesis of splenocytes	1.07E-03				EGR1	1
Embryonic Development	erythropoiesis	erythropoiesis of splenocytes	1.07E-03				EGR1	1
Hematopoiesis	erythropoiesis	erythropoiesis of splenocytes	1.07E-03				EGR1	1
Lymphoid Tissue Structure and Development	erythropoiesis	erythropoiesis of splenocytes	1.07E-03				EGR1	1
Organ Development	erythropoiesis	erythropoiesis of splenocytes	1.07E-03				EGR1	1
Organismal Development	erythropoiesis	erythropoiesis of splenocytes	1.07E-03				EGR1	1
Tissue Development	erythropoiesis	erythropoiesis of splenocytes	1.07E-03				EGR1	1
Infectious Disease	infection	infection by Chikungunya virus	1.07E-03				ISG15	1
Cell-To-Cell Signaling and Interaction	long-term potentiation	long-term potentiation of dentate gyrus	1.07E-03				EGR1	1
Nervous System Development and Function	long-term potentiation	long-term potentiation of dentate gyrus	1.07E-03				EGR1	1
Hepatic System Development and Function	metaphase/anaphase transition	metaphase/anaphase transition of liver cells	1.07E-03				EGR1	1
Cell Cycle	metaphase/anaphase transition	metaphase/anaphase transition of liver cells	1.07E-03				EGR1	1
Hematological System Development and Function	opsonization	opsonization of red blood cells	1.07E-03				C3	1
Cell Death	opsonization	opsonization of red blood cells	1.07E-03				C3	1
Cellular Growth and Proliferation	outgrowth	outgrowth of breast cancer cell lines	1.07E-03				CYR61	1
Cellular Development	outgrowth	outgrowth of breast cancer cell lines	1.07E-03				CYR61	1
Cardiovascular System Development and Function	structural integrity	structural integrity of vasculature	1.07E-03				CYR61	1
Cancer	tumorigenesis	tumorigenesis of endometrial cancer cell lines	1.07E-03				CYR61	1
Reproductive System Development and Function	function	function of reproductive system	1.07E-03				C3,EGR1	2
Connective Tissue Development and Function	quantity	quantity of connective tissue cells	1.21E-03				C3,CTGF,EGR1	3
Tissue Morphology	quantity	quantity of connective tissue cells	1.21E-03				C3,CTGF,EGR1	3
Reproductive System Disease	endometriosis	endometriosis	1.32E-03				CTGF,CYR61,EGR1,SGK1	4
Renal and Urological Disease	albuminuria	albuminuria	1.59E-03				CTGF,SGK1	2
Metabolic Disease	albuminuria	albuminuria	1.59E-03				CTGF,SGK1	2
Reproductive System Development and Function	ovulation	ovulation	1.82E-03				CTGF,EGR1	2
Connective Tissue Development and Function	apposition	apposition of femur	2.13E-03				CTGF	1
Skeletal and Muscular System Development and Function	apposition	apposition of femur	2.13E-03				CTGF	1
Cellular Compromise	atrophy	atrophy of Leydig cells	2.13E-03				EGR1	1
Organismal Injury and Abnormalities	atrophy	atrophy of Leydig cells	2.13E-03				EGR1	1
Lipid Metabolism	clearance	clearance of fatty acid	2.13E-03				C3	1
Molecular Transport	clearance	clearance of fatty acid	2.13E-03				C3	1
Small Molecule Biochemistry	clearance	clearance of fatty acid	2.13E-03				C3	1
Cellular Growth and Proliferation	colony formation	colony formation of endometrial cancer cell lines	2.13E-03				CYR61	1
Infectious Disease	infection	infection of central nervous system	2.13E-03				CTGF	1
Neurological Disease	infection	infection of central nervous system	2.13E-03				C3	1
Infectious Disease	infectivity	infectivity of Zaire ebolavirus	2.13E-03				CLEC10A	1
Hematological System Development and Function	localization	localization of neutrophils	2.13E-03				C3	1
Inflammatory Response	localization	localization of neutrophils	2.13E-03				C3	1
Cellular Movement	localization	localization of neutrophils	2.13E-03				C3	1
Cellular Function and Maintenance	localization	localization of neutrophils	2.13E-03				C3	1
Immune Cell Trafficking	localization	localization of neutrophils	2.13E-03				C3	1

Hematological System Development and Function						
Cellular Development	metabolism	metabolism of thymocytes	2,13E-03	EGR1	1	
Hematopoiesis	metabolism	metabolism of thymocytes	2,13E-03	EGR1	1	
Lymphoid Tissue Structure and Development	metabolism	metabolism of thymocytes	2,13E-03	EGR1	1	
Cell-mediated Immune Response	metabolism	metabolism of thymocytes	2,13E-03	EGR1	1	
Cellular Function and Maintenance	metabolism	metabolism of thymocytes	2,13E-03	EGR1	1	
Cell Morphology	morphology	morphology of germ cell tumor cell lines	2,13E-03	EGR1	1	
Cell Morphology	morphology	morphology of somatotrophs	2,13E-03	EGR1	1	
Organ Morphology	morphology	morphology of somatotrophs	2,13E-03	EGR1	1	
Nervous System Development and Function	morphology	morphology of somatotrophs	2,13E-03	EGR1	1	
Reproductive System Development and Function	morphology	morphology of somatotrophs	2,13E-03	EGR1	1	
Endocrine System Development and Function	morphology	morphology of somatotrophs	2,13E-03	EGR1	1	
Lipid Metabolism	production	production of 1-oleoylglycerol	2,13E-03	C3	1	
Small Molecule Biochemistry	production	production of 1-oleoylglycerol	2,13E-03	C3	1	
Organismal Injury and Abnormalities	interstitial fibrosis	interstitial fibrosis	2,53E-03	C3,EGR1	2	
Digestive System Development and Function	function	function of liver	2,68E-03	C3,EGR1	2	
Hepatic System Development and Function	function	function of liver	2,68E-03	C3,EGR1	2	
Organ Development	function	function of liver	2,68E-03	C3,EGR1	2	
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of epithelial cells	2,97E-03	2010109103Rik,C3	2	
Tissue Development	adhesion	adhesion of epithelial cells	2,97E-03	2010109103Rik,C3	2	
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of vascular smooth muscle cells	3,19E-03	CYR61	1	
Skeletal and Muscular System Development and Function	adhesion	adhesion of vascular smooth muscle cells	3,19E-03	CYR61	1	
Tissue Development	adhesion	adhesion of vascular smooth muscle cells	3,19E-03	CYR61	1	
Cellular Growth and Proliferation	growth	arrest in growth of melanoma cells	3,19E-03	EGR1	1	
Cellular Development	growth	arrest in growth of melanoma cells	3,19E-03	EGR1	1	
Tumor Morphology	growth	arrest in growth of melanoma cells	3,19E-03	EGR1	1	
Cellular Assembly and Organization	formation	delay in formation of actin stress fibers	3,19E-03	CTGF	1	
Tissue Development	formation	delay in formation of actin stress fibers	3,19E-03	CTGF	1	
Cellular Function and Maintenance	formation	delay in formation of actin stress fibers	3,19E-03	CTGF	1	
Cellular Compromise	disassembly	disassembly of actin	3,19E-03	CTGF	1	
Cellular Function and Maintenance	efflux	efflux of Na+	3,19E-03	SGK1	1	
Molecular Transport	efflux	efflux of Na+	3,19E-03	SGK1	1	
Cellular Assembly and Organization	formation	formation of endocytotic vesicle	3,19E-03	C3	1	
Cellular Function and Maintenance	formation	formation of endocytotic vesicle	3,19E-03	C3	1	
Hematological System Development and Function	generation	generation of germinal center B lymphocytes	3,19E-03	C3	1	
Cellular Growth and Proliferation	generation	generation of germinal center B lymphocytes	3,19E-03	C3	1	
Tissue Development	generation	generation of germinal center B lymphocytes	3,19E-03	C3	1	
Humoral Immune Response	generation	generation of germinal center B lymphocytes	3,19E-03	C3	1	
Metabolic Disease	hyperkalemia	hyperkalemia	3,19E-03	SGK1	1	
Developmental Disorder	hypertrophy	hypertrophy of lymph node	3,19E-03	C3	1	
Immunological Disease	hypertrophy	hypertrophy of lymph node	3,19E-03	C3	1	
Cellular Assembly and Organization	induction	induction of actin stress fibers	3,19E-03	CTGF	1	
Infectious Disease	infection	infection by Murine herpesvirus 4	3,19E-03	C3	1	
Cellular Compromise	injury	injury of podocytes	3,19E-03	C3	1	
Renal and Urological Disease	injury	injury of podocytes	3,19E-03	C3	1	
Organismal Injury and Abnormalities	injury	injury of podocytes	3,19E-03	C3	1	
Inflammatory Response	phagocytosis	phagocytosis by dendritic cells	3,19E-03	C3	1	
Cell-To-Cell Signaling and Interaction	phagocytosis	phagocytosis by dendritic cells	3,19E-03	C3	1	
Cellular Function and Maintenance	phagocytosis	phagocytosis by dendritic cells	3,19E-03	C3	1	
Antigen Presentation	phagocytosis	phagocytosis by dendritic cells	3,19E-03	C3	1	
Cellular Development	differentiation	differentiation of tumor cell lines	3,41E-03	CTGF,CYR61,EGR1	3	
Cellular Assembly and Organization	formation	formation of lamellipodia	3,45E-03	CTGF,CYR61	2	
Cell Morphology	formation	formation of lamellipodia	3,45E-03	CTGF,CYR61	2	
Cellular Function and Maintenance	formation	formation of lamellipodia	3,45E-03	CTGF,CYR61	2	
Organismal Functions	energy expenditure	energy expenditure	3,69E-03	C3,Mup1 (includes others)	2	
Neurological Disease	neuromuscular disease	neuromuscular disease	3,81E-03	C3,CTGF,EGR1,ISG15,SGK1	5	
Skeletal and Muscular Disorders	neuromuscular disease	neuromuscular disease	3,81E-03	C3,CTGF,EGR1,ISG15,SGK1	5	
Cancer	carcinoma	carcinoma	3,93E-03	C3,CLDN5,CLEC10A,CTGF,CYR61,EGR1,IFI27L2,ISG15,SGK1	9	
Cellular Assembly and Organization	formation	formation of filopodia	4,04E-03	CTGF,CYR61	2	
Cell Morphology	formation	formation of filopodia	4,04E-03	CTGF,CYR61	2	
Cellular Function and Maintenance	formation	formation of filopodia	4,04E-03	CTGF,CYR61	2	
Cancer	non-Hodgkin's disease	non-Hodgkin's disease	4,18E-03	CYR61,EGR1,SGK1	3	
Hematological Disease	non-Hodgkin's disease	non-Hodgkin's disease	4,18E-03	CYR61,EGR1,SGK1	3	
Cell-To-Cell Signaling and Interaction	attachment	attachment of brain cancer cell lines	4,26E-03	EGR1	1	
Tissue Development	attachment	attachment of brain cancer cell lines	4,26E-03	EGR1	1	
Cell-To-Cell Signaling and Interaction	binding	binding of skin cell lines	4,26E-03	CYR61	1	
Hair and Skin Development and Function	binding	binding of skin cell lines	4,26E-03	CYR61	1	
Cell Death	cell death	cell death of bone marrow stromal cells	4,26E-03	EGR1	1	
Cellular Compromise	injury	injury of hepatocytes	4,26E-03	EGR1	1	
Gastrointestinal Disease	injury	injury of hepatocytes	4,26E-03	EGR1	1	
Hepatic System Disease	injury	injury of hepatocytes	4,26E-03	EGR1	1	
Organismal Injury and Abnormalities	injury	injury of hepatocytes	4,26E-03	EGR1	1	
Cellular Movement	migration	migration of sarcoma cell lines	4,26E-03	EGR1	1	
Cellular Development	differentiation	onset of differentiation of keratinocyte cancer cell lines	4,26E-03	CYR61	1	
Tissue Morphology	quantity	quantity of myeloma cell lines	4,26E-03	SGK1	1	
Cancer	tumorigenesis	tumorigenesis of stomach cancer cell lines	4,26E-03	CYR61	1	
Connective Tissue Development and Function	quantity	quantity of osteoclasts	4,77E-03	C3,EGR1	2	
Tissue Morphology	quantity	quantity of osteoclasts	4,77E-03	C3,EGR1	2	
Dermatological Diseases and Conditions	psoriasis	psoriasis	4,88E-03	C3,EGR1,ISG15,SGK1	4	
Hematological System Development and Function	expansion	expansion of T lymphocytes	5,25E-03	C3,EGR1	2	
Cellular Growth and Proliferation	expansion	expansion of T lymphocytes	5,25E-03	C3,EGR1	2	
Cellular Development	expansion	expansion of T lymphocytes	5,25E-03	C3,EGR1	2	
Skeletal and Muscular System Development and Function	abnormal morphology	abnormal morphology of appendicular skeleton	5,32E-03	CTGF	1	
Cell Death	apoptosis	apoptosis of mesangial cells	5,32E-03	CTGF	1	
Infectious Disease	replication	replication of Vaccinia virus WR	5,32E-03	ISG15	1	
Cancer	tumorigenesis	tumorigenesis of leukemia cell lines	5,32E-03	EGR1	1	
Hematological Disease	tumorigenesis	tumorigenesis of leukemia cell lines	5,32E-03	EGR1	1	
Hematological System Development and Function	quantity	quantity of blood platelets	6,07E-03	CLEC10A,EGR1	2	
Inflammatory Response	quantity	quantity of blood platelets	6,07E-03	CLEC10A,EGR1	2	

Tissue Morphology							
Inflammatory Response	inflammation	inflammation of liver	6,07E-03		CLEC10A,EGR1		2
Digestive System Development and Function	inflammation	inflammation of liver	6,18E-03		C3,EGR1		2
Hepatic System Development and Function	inflammation	inflammation of liver	6,18E-03		C3,EGR1		2
Organ Development	inflammation	inflammation of liver	6,18E-03		C3,EGR1		2
Cell Death	apoptosis	apoptosis of endometrial cancer cell lines	6,38E-03		CYR61		1
Cellular Development	maturation	maturation of plasmacytoid dendritic cells	6,38E-03		EGR1		1
Hematopoiesis	maturation	maturation of plasmacytoid dendritic cells	6,38E-03		EGR1		1
Cardiovascular System Development and Function	morphogenesis	morphogenesis of atrioventricular valve	6,38E-03		CYR61		1
Embryonic Development	morphogenesis	morphogenesis of atrioventricular valve	6,38E-03		CYR61		1
Organ Development	morphogenesis	morphogenesis of atrioventricular valve	6,38E-03		CYR61		1
Organismal Development	morphogenesis	morphogenesis of atrioventricular valve	6,38E-03		CYR61		1
Tissue Development	morphogenesis	morphogenesis of atrioventricular valve	6,38E-03		CYR61		1
Cellular Compromise	perturbation	perturbation of cells	6,38E-03		CLDN5		1
Neurological Disease	Huntington's disease	Huntington's disease	6,50E-03		C3,CTGF,EGR1,SGK1		4
Skeletal and Muscular Disorders	Huntington's disease	Huntington's disease	6,50E-03		C3,CTGF,EGR1,SGK1		4
Hereditary Disorder	Huntington's disease	Huntington's disease	6,50E-03		C3,CTGF,EGR1,SGK1		4
Connective Tissue Development and Function	development	cartilage development	6,51E-03		CTGF,CYR61		2
Skeletal and Muscular System Development and Function	development	cartilage development	6,51E-03		CTGF,CYR61		2
Tissue Development	development	cartilage development	6,51E-03		CTGF,CYR61		2
Organismal Survival	mortality	mortality	6,51E-03		C3,ISG15		2
Cellular Growth and Proliferation	proliferation	proliferation of brain cancer cell lines	7,18E-03		CYR61,EGR1		2
Cellular Development	proliferation	proliferation of brain cancer cell lines	7,18E-03		CYR61,EGR1		2
Tissue Morphology	size	size of infarct	7,18E-03		C3,EGR1		2
Cardiovascular Disease	size	size of infarct	7,18E-03		C3,EGR1		2
Embryonic Development	development	development of ovary	7,41E-03		CTGF,EGR1		2
Organ Development	development	development of ovary	7,41E-03		CTGF,EGR1		2
Organismal Development	development	development of ovary	7,41E-03		CTGF,EGR1		2
Tissue Development	development	development of ovary	7,41E-03		CTGF,EGR1		2
Reproductive System Development and Function	development	development of ovary	7,41E-03		CTGF,EGR1		2
Renal and Urological System Development and Function	development	development of ovary	7,41E-03		CTGF,EGR1		2
Infectious Disease	infection	Pneumococcal infection	7,44E-03		C3		1
Respiratory System Development and Function	abnormal morphology	abnormal morphology of conducting airway	7,44E-03		CTGF		1
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of stomach cancer cell lines	7,44E-03		CYR61		1
Tissue Development	adhesion	adhesion of stomach cancer cell lines	7,44E-03		CYR61		1
Cell Death	apoptosis	apoptosis of acinar gland cells	7,44E-03		C3		1
Cellular Growth and Proliferation	cytostasis	cytostasis of carcinoma cell lines	7,44E-03		CYR61		1
Cardiovascular Disease	diastolic heart failure	diastolic heart failure	7,44E-03		CTGF		1
Cellular Development	differentiation	differentiation of rhabdomyosarcoma cell lines	7,44E-03		CTGF		1
Cardiovascular System Development and Function	morphogenesis	morphogenesis of atrial septum	7,44E-03		CYR61		1
Embryonic Development	morphogenesis	morphogenesis of atrial septum	7,44E-03		CYR61		1
Organ Development	morphogenesis	morphogenesis of atrial septum	7,44E-03		CYR61		1
Organismal Development	morphogenesis	morphogenesis of atrial septum	7,44E-03		CYR61		1
Tissue Development	morphogenesis	morphogenesis of atrial septum	7,44E-03		CYR61		1
Renal and Urological Disease	tubulo-interstitial fibrosis	tubulo-interstitial fibrosis of kidney	7,44E-03		C3		1
Organismal Injury and Abnormalities	tubulo-interstitial fibrosis	tubulo-interstitial fibrosis of kidney	7,44E-03		C3		1
Gastrointestinal Disease	damage	damage of liver	7,76E-03		C3,EGR1		2
Hepatic System Disease	damage	damage of liver	7,76E-03		C3,EGR1		2
Organismal Injury and Abnormalities	damage	damage of liver	7,76E-03		C3,EGR1		2
Cell Death	apoptosis	apoptosis of gonadal cells	8,49E-03		CTGF,EGR1		2
Skeletal and Muscular Disorders	K/BxN serum transfer arthritis	K/BxN serum transfer arthritis	8,50E-03		C3		1
Connective Tissue Disorders	K/BxN serum transfer arthritis	K/BxN serum transfer arthritis	8,50E-03		C3		1
Inflammatory Disease	K/BxN serum transfer arthritis	K/BxN serum transfer arthritis	8,50E-03		C3		1
Inflammatory Response	alternative complement pathway	alternative complement pathway	8,50E-03		C3		1
Antigen Presentation	alternative complement pathway	alternative complement pathway	8,50E-03		C3		1
Humoral Immune Response	alternative complement pathway	alternative complement pathway	8,50E-03		C3		1
Ophthalmic Disease	choroidal neovascularization	choroidal neovascularization of eye	8,50E-03		C3		1
Hematological System Development and Function	differentiation	differentiation of B-1 lymphocytes	8,50E-03		EGR1		1
Cellular Development	differentiation	differentiation of B-1 lymphocytes	8,50E-03		EGR1		1
Hematopoiesis	differentiation	differentiation of B-1 lymphocytes	8,50E-03		EGR1		1
Humoral Immune Response	differentiation	differentiation of B-1 lymphocytes	8,50E-03		EGR1		1
Cellular Function and Maintenance	function	function of chondrocytes	8,50E-03		CTGF		1
Cellular Assembly and Organization	morphogenesis	morphogenesis of mitochondria	8,50E-03		Mup1 (includes others)		1
Cellular Function and Maintenance	reabsorption	reabsorption of Na+	8,50E-03		SGK1		1
Molecular Transport	reabsorption	reabsorption of Na+	8,50E-03		SGK1		1
Infectious Disease	scrapie	scrapie	8,50E-03		C3		1
Neurological Disease	scrapie	scrapie	8,50E-03		C3		1
Cancer	tumorigenesis	tumorigenesis of cells	8,57E-03		C3,CYR61,EGR1		3
Cancer	T-cell non-Hodgkin's disease	T-cell non-Hodgkin's disease	8,74E-03		CYR61,EGR1		2
Hematological Disease	T-cell non-Hodgkin's disease	T-cell non-Hodgkin's disease	8,74E-03		CYR61,EGR1		2
Cellular Growth and Proliferation	proliferation	proliferation of epithelial cell lines	9,38E-03		CYR61,EGR1		2
Cellular Development	proliferation	proliferation of epithelial cell lines	9,38E-03		CYR61,EGR1		2
Hair and Skin Development and Function	proliferation	proliferation of epithelial cell lines	9,38E-03		CYR61,EGR1		2
Tissue Morphology	abnormal morphology	abnormal morphology of nasal capsule	9,55E-03		CTGF		1
Cell Death	cytolysis	cytolysis of leukemia cell lines	9,55E-03		ISG15		1
Cell Death	cytolysis	cytolysis of lymphoma cell lines	9,55E-03		ISG15		1
Cancer	development	development of T-cell non-Hodgkin lymphoma	9,55E-03		EGR1		1
Immunological Disease	development	development of T-cell non-Hodgkin lymphoma	9,55E-03		EGR1		1
Immunological Disease	hypersensitivity reaction type II	hypersensitivity reaction type II	9,55E-03		C3		1
Antimicrobial Response	immune protection	immune protection of organism	9,55E-03		C3		1
Cellular Movement	migration	migration of bone marrow cell lines	9,55E-03		EGR1		1
Inflammatory Response	pulmonary interstitial fibrosis	pulmonary interstitial fibrosis	9,55E-03		EGR1		1
Organismal Injury and Abnormalities	pulmonary interstitial fibrosis	pulmonary interstitial fibrosis	9,55E-03		EGR1		1
Connective Tissue Disorders	pulmonary interstitial fibrosis	pulmonary interstitial fibrosis	9,55E-03		EGR1		1
Inflammatory Disease	pulmonary interstitial fibrosis	pulmonary interstitial fibrosis	9,55E-03		EGR1		1
Respiratory Disease	pulmonary interstitial fibrosis	pulmonary interstitial fibrosis	9,55E-03		EGR1		1
Connective Tissue Development and Function	ossification	ossification of bone	1,02E-02		CTGF,ISG15		2
Embryonic Development	ossification	ossification of bone	1,02E-02		CTGF,ISG15		2
Organ Development	ossification	ossification of bone	1,02E-02		CTGF,ISG15		2

Organismal Development					
Skeletal and Muscular System Development and Function	ossification	ossification of bone	1,02E-02	CTGF,ISG15	2
Tissue Development	ossification	ossification of bone	1,02E-02	CTGF,ISG15	2
Connective Tissue Development and Function	bone mineral density	bone mineral density	1,06E-02	CTGF,ISG15	2
Skeletal and Muscular System Development and Function	bone mineral density	bone mineral density	1,06E-02	CTGF,EGR1	2
Organismal Development	abnormal morphology	abnormal morphology of thoracic cavity	1,06E-02	CTGF	1
Cardiovascular System Development and Function	adhesion	adhesion of endothelial tissue	1,06E-02	C3	1
Tissue Development	adhesion	adhesion of endothelial tissue	1,06E-02	C3	1
Embryonic Development	fusion	fusion of allantois	1,06E-02	CYR61	1
Organismal Development	fusion	fusion of allantois	1,06E-02	CYR61	1
Tissue Morphology	fusion	fusion of allantois	1,06E-02	CYR61	1
Embryonic Development	fusion	fusion of chorion	1,06E-02	CYR61	1
Organismal Development	fusion	fusion of chorion	1,06E-02	CYR61	1
Tissue Morphology	fusion	fusion of chorion	1,06E-02	CYR61	1
Inflammatory Response	inflammatory response	inflammatory response of lung	1,06E-02	ISG15	1
Neurological Disease	loss	loss of axons	1,06E-02	C3	1
Renal and Urological Disease	acute kidney injury	acute kidney injury	1,17E-02	CYR61	1
Cellular Movement	chemotaxis	chemotaxis of macrophage cancer cell lines	1,17E-02	C3	1
Embryonic Development	development	development of adenohypophysis	1,17E-02	EGR1	1
Nervous System Development and Function	development	development of adenohypophysis	1,17E-02	EGR1	1
Organ Development	development	development of adenohypophysis	1,17E-02	EGR1	1
Organismal Development	development	development of adenohypophysis	1,17E-02	EGR1	1
Tissue Development	development	development of adenohypophysis	1,17E-02	EGR1	1
Reproductive System Development and Function	development	development of adenohypophysis	1,17E-02	EGR1	1
Endocrine System Development and Function	development	development of adenohypophysis	1,17E-02	EGR1	1
Organismal Functions	healing	healing of bone	1,17E-02	CYR61	1
Lipid Metabolism	incorporation	incorporation of oleic acid	1,17E-02	C3	1
Small Molecule Biochemistry	incorporation	incorporation of oleic acid	1,17E-02	C3	1
Cellular Movement	migration	migration of mesangial cells	1,17E-02	CTGF	1
Renal and Urological System Development and Function	migration	migration of mesangial cells	1,17E-02	CTGF	1
Lipid Metabolism	clearance	clearance of triacylglycerol	1,27E-02	C3	1
Molecular Transport	clearance	clearance of triacylglycerol	1,27E-02	C3	1
Small Molecule Biochemistry	clearance	clearance of triacylglycerol	1,27E-02	C3	1
Cellular Growth and Proliferation	cytostasis	cytostasis of lung cancer cell lines	1,27E-02	CYR61	1
Cellular Function and Maintenance	homeostasis	homeostasis of D-glucose	1,33E-02	C3,Mup1 (includes others)	2
Small Molecule Biochemistry	homeostasis	homeostasis of D-glucose	1,33E-02	C3,Mup1 (includes others)	2
Carbohydrate Metabolism	homeostasis	homeostasis of D-glucose	1,33E-02	C3,Mup1 (includes others)	2
Neurological Disease	multiple sclerosis	multiple sclerosis	1,36E-02	EGR1,ISG15	2
Skeletal and Muscular Disorders	multiple sclerosis	multiple sclerosis	1,36E-02	EGR1,ISG15	2
Inflammatory Disease	multiple sclerosis	multiple sclerosis	1,36E-02	EGR1,ISG15	2
Organ Morphology	abnormal morphology	abnormal morphology of anterior chamber of eye	1,38E-02	EGR1	1
Embryonic Development	abnormal morphology	abnormal morphology of anterior chamber of eye	1,38E-02	EGR1	1
Organ Development	abnormal morphology	abnormal morphology of anterior chamber of eye	1,38E-02	EGR1	1
Organismal Development	abnormal morphology	abnormal morphology of anterior chamber of eye	1,38E-02	EGR1	1
Tissue Development	abnormal morphology	abnormal morphology of anterior chamber of eye	1,38E-02	EGR1	1
Visual System Development and Function	abnormal morphology	abnormal morphology of anterior chamber of eye	1,38E-02	EGR1	1
Inflammatory Disease	allergic asthma	allergic asthma	1,38E-02	C3	1
Respiratory Disease	allergic asthma	allergic asthma	1,38E-02	C3	1
Immunological Disease	autoimmune hemolytic anemia	autoimmune hemolytic anemia	1,38E-02	C3	1
Hematological Disease	autoimmune hemolytic anemia	autoimmune hemolytic anemia	1,38E-02	C3	1
Nervous System Development and Function	long-term recognition memory	long-term recognition memory	1,38E-02	EGR1	1
Behavior	long-term recognition memory	long-term recognition memory	1,38E-02	EGR1	1
Organismal Survival	morbidity	morbidity	1,38E-02	C3	1
Inflammatory Disease	peritonitis	peritonitis	1,38E-02	C3	1
Cellular Growth and Proliferation	proliferation	proliferation of rhabdomyosarcoma cell lines	1,38E-02	CTGF	1
Cellular Development	proliferation	proliferation of rhabdomyosarcoma cell lines	1,38E-02	CTGF	1
Cardiovascular System Development and Function	tubulogenesis	tubulogenesis of endothelial cells	1,38E-02	CYR61	1
Cellular Development	tubulogenesis	tubulogenesis of endothelial cells	1,38E-02	CYR61	1
Embryonic Development	tubulogenesis	tubulogenesis of endothelial cells	1,38E-02	CYR61	1
Organismal Development	tubulogenesis	tubulogenesis of endothelial cells	1,38E-02	CYR61	1
Tissue Development	tubulogenesis	tubulogenesis of endothelial cells	1,38E-02	CYR61	1
Cancer	tumorigenesis	tumorigenesis of tumor cell lines	1,46E-02	CYR61,EGR1	2
Cell Cycle	G1 phase	arrest in G1 phase of carcinoma cell lines	1,46E-02	CYR61	1
Cancer	hereditary gingival fibromatosis	hereditary gingival fibromatosis	1,48E-02	EGR1	1
Gastrointestinal Disease	hereditary gingival fibromatosis	hereditary gingival fibromatosis	1,48E-02	EGR1	1
Skeletal and Muscular Disorders	hereditary gingival fibromatosis	hereditary gingival fibromatosis	1,48E-02	EGR1	1
Hereditary Disorder	hereditary gingival fibromatosis	hereditary gingival fibromatosis	1,48E-02	EGR1	1
Connective Tissue Disorders	hereditary gingival fibromatosis	hereditary gingival fibromatosis	1,48E-02	EGR1	1
Protein Synthesis	quantity	quantity of hemoglobin in blood	1,48E-02	CLEC10A	1
Digestive System Development and Function	secretion	secretion of saliva	1,48E-02	C3	1
Organismal Development	secretion	secretion of saliva	1,48E-02	C3	1
Cellular Growth and Proliferation	proliferation	proliferation of cancer cells	1,57E-02	CYR61,EGR1	2
Cellular Development	proliferation	proliferation of cancer cells	1,57E-02	CYR61,EGR1	2
Tumor Morphology	proliferation	proliferation of cancer cells	1,57E-02	CYR61,EGR1	2
Cell Death	apoptosis	apoptosis of granulosa cells	1,59E-02	CTGF	1
Neurological Disease	demyelination	demyelination of spinal cord	1,59E-02	C3	1
Cell Death	focal necrosis	focal necrosis of liver	1,59E-02	C3	1
Infectious Disease	infection	infection of leukocyte cell lines	1,59E-02	C3	1
Cellular Growth and Proliferation	proliferation	proliferation of microvascular endothelial cells	1,59E-02	C3	1
Cardiovascular System Development and Function	proliferation	proliferation of microvascular endothelial cells	1,59E-02	C3	1
Cellular Development	proliferation	proliferation of microvascular endothelial cells	1,59E-02	C3	1
Organismal Development	proliferation	proliferation of microvascular endothelial cells	1,59E-02	C3	1
Tissue Development	proliferation	proliferation of microvascular endothelial cells	1,59E-02	C3	1
Inflammatory Response	classical complement pathway	classical complement pathway	1,69E-02	C3	1
Antigen Presentation	classical complement pathway	classical complement pathway	1,69E-02	C3	1
Humoral Immune Response	classical complement pathway	classical complement pathway	1,69E-02	C3	1
Cellular Growth and Proliferation	colony formation	colony formation of leukemia cell lines	1,69E-02	EGR1	1
Renal and Urological Disease	dysfunction	dysfunction of kidney	1,69E-02	C3	1
Organismal Injury and Abnormalities	dysfunction	dysfunction of kidney	1,69E-02	C3	1

Cellular Assembly and Organization	formation	formation of tight junctions	1.69E-02	CLDN5	1
Cell-To-Cell Signaling and Interaction	formation	formation of tight junctions	1.69E-02	CLDN5	1
Tissue Development	formation	formation of tight junctions	1.69E-02	CLDN5	1
Cellular Function and Maintenance	formation	formation of tight junctions	1.69E-02	CLDN5	1
Renal and Urological System Development and Function	glomerular filtration rate	glomerular filtration rate of kidney	1.69E-02	SGK1	1
Cardiovascular System Development and Function	morphogenesis	morphogenesis of ventricular septum	1.69E-02	CYR61	1
Embryonic Development	morphogenesis	morphogenesis of ventricular septum	1.69E-02	CYR61	1
Organ Development	morphogenesis	morphogenesis of ventricular septum	1.69E-02	CYR61	1
Organismal Development	morphogenesis	morphogenesis of ventricular septum	1.69E-02	CYR61	1
Tissue Development	morphogenesis	morphogenesis of ventricular septum	1.69E-02	CYR61	1
Cancer	peripheral T-cell lymphoma	peripheral T-cell lymphoma	1.69E-02	CYR61	1
Hematological Disease	peripheral T-cell lymphoma	peripheral T-cell lymphoma	1.69E-02	CYR61	1
Cellular Growth and Proliferation	proliferation	proliferation of prostate cell lines	1.69E-02	CYR61	1
Cellular Development	proliferation	proliferation of prostate cell lines	1.69E-02	CYR61	1
Reproductive System Development and Function	proliferation	proliferation of prostate cell lines	1.69E-02	CYR61	1
Infectious Disease	release	release of HIV-1	1.69E-02	ISG15	1
Cell Morphology	abnormal morphology	abnormal morphology of Leydig cells	1.80E-02	EGR1	1
Organ Morphology	abnormal morphology	abnormal morphology of Leydig cells	1.80E-02	EGR1	1
Tissue Morphology	abnormal morphology	abnormal morphology of Leydig cells	1.80E-02	EGR1	1
Reproductive System Development and Function	abnormal morphology	abnormal morphology of Leydig cells	1.80E-02	EGR1	1
Organ Morphology	abnormal morphology	abnormal morphology of fibula	1.80E-02	CTGF	1
Connective Tissue Development and Function	abnormal morphology	abnormal morphology of fibula	1.80E-02	CTGF	1
Embryonic Development	abnormal morphology	abnormal morphology of fibula	1.80E-02	CTGF	1
Organ Development	abnormal morphology	abnormal morphology of fibula	1.80E-02	CTGF	1
Organismal Development	abnormal morphology	abnormal morphology of fibula	1.80E-02	CTGF	1
Skeletal and Muscular System Development and Function	abnormal morphology	abnormal morphology of fibula	1.80E-02	CTGF	1
Tissue Development	abnormal morphology	abnormal morphology of fibula	1.80E-02	CTGF	1
Hematological System Development and Function	accumulation	accumulation of eosinophils	1.80E-02	EGR1	1
Inflammatory Response	accumulation	accumulation of eosinophils	1.80E-02	EGR1	1
Tissue Development	accumulation	accumulation of eosinophils	1.80E-02	EGR1	1
Immune Cell Trafficking	accumulation	accumulation of eosinophils	1.80E-02	EGR1	1
Hypersensitivity Response	accumulation	accumulation of eosinophils	1.80E-02	EGR1	1
Infectious Disease	growth	growth of virus	1.80E-02	ISG15	1
Organismal Development	growth	growth of virus	1.80E-02	ISG15	1
Hematological System Development and Function	migration	migration of Langerhans cells	1.80E-02	C3	1
Inflammatory Response	migration	migration of Langerhans cells	1.80E-02	C3	1
Cellular Movement	migration	migration of Langerhans cells	1.80E-02	C3	1
Immune Cell Trafficking	migration	migration of Langerhans cells	1.80E-02	C3	1
Antigen Presentation	migration	migration of Langerhans cells	1.80E-02	C3	1
Cellular Growth and Proliferation	proliferation	proliferation of fibrosarcoma cell lines	1.80E-02	EGR1	1
Cellular Development	proliferation	proliferation of fibrosarcoma cell lines	1.80E-02	EGR1	1
Connective Tissue Development and Function	quantity	quantity of fibroblasts	1.80E-02	CTGF	1
Tissue Morphology	quantity	quantity of fibroblasts	1.80E-02	CTGF	1
Organ Morphology	size	size of eye	1.80E-02	EGR1	1
Embryonic Development	size	size of eye	1.80E-02	EGR1	1
Organ Development	size	size of eye	1.80E-02	EGR1	1
Organismal Development	size	size of eye	1.80E-02	EGR1	1
Tissue Development	size	size of eye	1.80E-02	EGR1	1
Visual System Development and Function	size	size of eye	1.80E-02	EGR1	1
Hematological System Development and Function	chemotaxis	chemotaxis of mast cells	1.90E-02	C3	1
Inflammatory Response	chemotaxis	chemotaxis of mast cells	1.90E-02	C3	1
Cellular Movement	chemotaxis	chemotaxis of mast cells	1.90E-02	C3	1
Immune Cell Trafficking	chemotaxis	chemotaxis of mast cells	1.90E-02	C3	1
Antigen Presentation	chemotaxis	chemotaxis of mast cells	1.90E-02	C3	1
Hypersensitivity Response	chemotaxis	chemotaxis of mast cells	1.90E-02	C3	1
Cancer	prostate cancer	prostate cancer	1.94E-02	C3,ISG15,SGK1	3
Reproductive System Disease	prostate cancer	prostate cancer	1.94E-02	C3,ISG15,SGK1	3
Hereditary Disorder	prostate cancer	prostate cancer	1.94E-02	C3,ISG15,SGK1	3
Organ Morphology	abnormal morphology	abnormal morphology of atlas	2.01E-02	CTGF	1
Connective Tissue Development and Function	abnormal morphology	abnormal morphology of atlas	2.01E-02	CTGF	1
Embryonic Development	abnormal morphology	abnormal morphology of atlas	2.01E-02	CTGF	1
Nervous System Development and Function	abnormal morphology	abnormal morphology of atlas	2.01E-02	CTGF	1
Organ Development	abnormal morphology	abnormal morphology of atlas	2.01E-02	CTGF	1
Organismal Development	abnormal morphology	abnormal morphology of atlas	2.01E-02	CTGF	1
Skeletal and Muscular System Development and Function	abnormal morphology	abnormal morphology of atlas	2.01E-02	CTGF	1
Tissue Development	abnormal morphology	abnormal morphology of atlas	2.01E-02	CTGF	1
Inflammatory Response	phagocytosis	phagocytosis of bacteria	2.01E-02	C3	1
Cell-To-Cell Signaling and Interaction	phagocytosis	phagocytosis of bacteria	2.01E-02	C3	1
Cellular Function and Maintenance	phagocytosis	phagocytosis of bacteria	2.01E-02	C3	1
Cellular Function and Maintenance	flux	flux of inorganic cation	2.02E-02	C3,SGK1	2
Molecular Transport	flux	flux of inorganic cation	2.02E-02	C3,SGK1	2
Organismal Development	abnormal morphology	abnormal morphology of blastocyst	2.11E-02	C3	1
Connective Tissue Development and Function	condensation	condensation of cartilage tissue	2.11E-02	CTGF	1
Skeletal and Muscular System Development and Function	condensation	condensation of cartilage tissue	2.11E-02	CTGF	1
Organismal Injury and Abnormalities	formation	formation of nodule	2.11E-02	CTGF	1
Hematological System Development and Function	function	function of microglia	2.11E-02	EGR1	1
Cellular Function and Maintenance	function	function of microglia	2.11E-02	EGR1	1
Antigen Presentation	function	function of microglia	2.11E-02	EGR1	1
Cancer	breast cancer	breast cancer	2.15E-02	CLEC10A,CTGF,CYR61,EGR1	4
Reproductive System Disease	breast cancer	breast cancer	2.15E-02	CLEC10A,CTGF,CYR61,EGR1	4
Cardiovascular System Development and Function	function	function of blood-brain barrier	2.22E-02	CLDN5	1
Nervous System Development and Function	function	function of blood-brain barrier	2.22E-02	CLDN5	1
Organ Development	function	function of blood-brain barrier	2.22E-02	CLDN5	1
Connective Tissue Development and Function	mass	mass of white adipose tissue	2.22E-02	C3	1
Tissue Morphology	mass	mass of white adipose tissue	2.22E-02	C3	1
Cellular Growth and Proliferation	proliferation	proliferation of endometrial cancer cell lines	2.22E-02	CYR61	1
Cellular Development	proliferation	proliferation of endometrial cancer cell lines	2.22E-02	CYR61	1
Cellular Growth and Proliferation	proliferation	proliferation of mammary tumor cells	2.22E-02	CYR61	1
Cellular Development	proliferation	proliferation of mammary tumor cells	2.22E-02	CYR61	1

Tumor Morphology	proliferation	proliferation of mammary tumor cells	2,22E-02	CYR61	1
Cell-To-Cell Signaling and Interaction	quantity	quantity of histamine	2,22E-02	C3	1
Molecular Transport	quantity	quantity of histamine	2,22E-02	C3	1
Small Molecule Biochemistry	quantity	quantity of histamine	2,22E-02	C3	1
Hematological Disease	Budd-Chiari syndrome	Budd-Chiari syndrome	2,32E-02	CTGF	1
Cardiovascular Disease	Budd-Chiari syndrome	Budd-Chiari syndrome	2,32E-02	CTGF	1
Tissue Morphology	abnormal morphology	abnormal morphology of mandibular cartilage	2,32E-02	CTGF	1
Cell Morphology	abnormal morphology	abnormal morphology of type II pneumocytes	2,32E-02	CTGF	1
Organ Morphology	abnormal morphology	abnormal morphology of type II pneumocytes	2,32E-02	CTGF	1
Embryonic Development	abnormal morphology	abnormal morphology of type II pneumocytes	2,32E-02	CTGF	1
Organ Development	abnormal morphology	abnormal morphology of type II pneumocytes	2,32E-02	CTGF	1
Organismal Development	abnormal morphology	abnormal morphology of type II pneumocytes	2,32E-02	CTGF	1
Tissue Development	abnormal morphology	abnormal morphology of type II pneumocytes	2,32E-02	CTGF	1
Respiratory System Development and Function	abnormal morphology	abnormal morphology of type II pneumocytes	2,32E-02	CTGF	1
Organ Morphology	abnormal morphology	abnormal morphology of vertebral column	2,32E-02	CTGF	1
Connective Tissue Development and Function	abnormal morphology	abnormal morphology of vertebral column	2,32E-02	CTGF	1
Embryonic Development	abnormal morphology	abnormal morphology of vertebral column	2,32E-02	CTGF	1
Nervous System Development and Function	abnormal morphology	abnormal morphology of vertebral column	2,32E-02	CTGF	1
Organ Development	abnormal morphology	abnormal morphology of vertebral column	2,32E-02	CTGF	1
Organismal Development	abnormal morphology	abnormal morphology of vertebral column	2,32E-02	CTGF	1
Skeletal and Muscular System Development and Function	abnormal morphology	abnormal morphology of vertebral column	2,32E-02	CTGF	1
Tissue Development	abnormal morphology	abnormal morphology of vertebral column	2,32E-02	CTGF	1
Cellular Growth and Proliferation	abnormal morphology	abnormal morphology of vertebral column	2,32E-02	CTGF	1
Cellular Assembly and Organization	colony formation	colony formation of prostate cancer cell lines	2,32E-02	EGR1	1
Cellular Movement	quantity	quantity of amyloid fibrils	2,32E-02	C3	1
Hair and Skin Development and Function	migration	migration of skin cell lines	2,42E-02	CYR61	1
Cardiovascular System Development and Function	migration	migration of skin cell lines	2,42E-02	CYR61	1
Cell Cycle	angiogenesis	angiogenesis	2,46E-02	C3,CTGF,CYR61	3
Cell Cycle	G1 phase	arrest in G1 phase of lung cancer cell lines	2,53E-02	CYR61	1
Organ Morphology	cell cycle progression	cell cycle progression of prostate cancer cell lines	2,53E-02	EGR1	1
Reproductive System Development and Function	mass	mass of uterus	2,53E-02	EGR1	1
Connective Tissue Development and Function	mass	mass of uterus	2,53E-02	EGR1	1
Skeletal and Muscular System Development and Function	strength	strength of bone	2,53E-02	ISG15	1
Cell-To-Cell Signaling and Interaction	strength	strength of bone	2,53E-02	ISG15	1
Tissue Development	adhesion	adhesion of tumor cell lines	2,53E-02	CYR61,EGR1	2
Cardiovascular System Development and Function	adhesion	adhesion of tumor cell lines	2,53E-02	CYR61,EGR1	2
Cellular Development	development	development of vascular endothelial cells	2,63E-02	CYR61	1
Organismal Development	development	development of vascular endothelial cells	2,63E-02	CYR61	1
Tissue Development	development	development of vascular endothelial cells	2,63E-02	CYR61	1
Neurological Disease	relapsing-remitting multiple sclerosis	relapsing-remitting multiple sclerosis	2,63E-02	ISG15	1
Skeletal and Muscular Disorders	relapsing-remitting multiple sclerosis	relapsing-remitting multiple sclerosis	2,63E-02	ISG15	1
Inflammatory Disease	relapsing-remitting multiple sclerosis	relapsing-remitting multiple sclerosis	2,63E-02	ISG15	1
Reproductive System Disease	relapsing-remitting multiple sclerosis	relapsing-remitting multiple sclerosis	2,63E-02	EGR1	1
Embryonic Development	sterility	sterility	2,70E-02	C3,EGR1	2
Lymphoid Tissue Structure and Development	development	development of lymphoid organ	2,70E-02	C3,EGR1	2
Organ Development	development	development of lymphoid organ	2,70E-02	C3,EGR1	2
Organismal Development	development	development of lymphoid organ	2,70E-02	C3,EGR1	2
Tissue Development	development	development of lymphoid organ	2,70E-02	C3,EGR1	2
Organ Morphology	abnormal morphology	abnormal morphology of radius	2,74E-02	CTGF	1
Connective Tissue Development and Function	abnormal morphology	abnormal morphology of radius	2,74E-02	CTGF	1
Embryonic Development	abnormal morphology	abnormal morphology of radius	2,74E-02	CTGF	1
Organ Development	abnormal morphology	abnormal morphology of radius	2,74E-02	CTGF	1
Organismal Development	abnormal morphology	abnormal morphology of radius	2,74E-02	CTGF	1
Skeletal and Muscular System Development and Function	abnormal morphology	abnormal morphology of radius	2,74E-02	CTGF	1
Tissue Development	abnormal morphology	abnormal morphology of radius	2,74E-02	CTGF	1
Hematological System Development and Function	activation	activation of mast cells	2,74E-02	C3	1
Inflammatory Response	activation	activation of mast cells	2,74E-02	C3	1
Cell-To-Cell Signaling and Interaction	activation	activation of mast cells	2,74E-02	C3	1
Immune Cell Trafficking	activation	activation of mast cells	2,74E-02	C3	1
Antigen Presentation	activation	activation of mast cells	2,74E-02	C3	1
Hypersensitivity Response	activation	activation of mast cells	2,74E-02	C3	1
Hematological System Development and Function	hematocrit	hematocrit of blood	2,74E-02	CLEC10A	1
Cellular Assembly and Organization	organization	organization of Golgi apparatus	2,74E-02	GOLGB1	1
Cellular Function and Maintenance	organization	organization of Golgi apparatus	2,74E-02	GOLGB1	1
Molecular Transport	quantity	quantity of K+	2,74E-02	SGK1	1
Cardiovascular System Development and Function	development	endothelial cell development	2,74E-02	C3,CYR61	2
Cellular Development	development	endothelial cell development	2,74E-02	C3,CYR61	2
Organismal Development	development	endothelial cell development	2,74E-02	C3,CYR61	2
Tissue Development	development	endothelial cell development	2,74E-02	C3,CYR61	2
Inflammatory Response	inflammatory response	inflammatory response	2,75E-02	C3,EGR1,ISG15	3
Cell Death	apoptosis	apoptosis of breast cancer cell lines	2,82E-02	CTGF,CYR61	2
Hematological System Development and Function	development	development of macrophages	2,84E-02	EGR1	1
Cellular Development	development	development of macrophages	2,84E-02	EGR1	1
Hematopoiesis	development	development of macrophages	2,84E-02	EGR1	1
Lymphoid Tissue Structure and Development	development	development of macrophages	2,84E-02	EGR1	1
Organ Morphology	quantity	quantity of corpus luteum	2,84E-02	CTGF	1
Reproductive System Development and Function	quantity	quantity of corpus luteum	2,84E-02	CTGF	1
Cellular Growth and Proliferation	proliferation	proliferation of carcinoma cell lines	2,86E-02	CYR61,EGR1	2
Cellular Development	proliferation	proliferation of carcinoma cell lines	2,86E-02	CYR61,EGR1	2
Cell-To-Cell Signaling and Interaction	binding	binding of fibroblast cell lines	2,94E-02	CYR61	1
Connective Tissue Development and Function	binding	binding of fibroblast cell lines	2,94E-02	CYR61	1
Protein Synthesis	cleavage	cleavage of protein fragment	2,94E-02	C3	1
Post-Translational Modification	cleavage	cleavage of protein fragment	2,94E-02	C3	1
Protein Degradation	cleavage	cleavage of protein fragment	2,94E-02	C3	1
Lipid Metabolism	esterification	esterification of cholesterol	2,94E-02	C3	1
Small Molecule Biochemistry	esterification	esterification of cholesterol	2,94E-02	C3	1
Organ Morphology	abnormal morphology	abnormal morphology of ulna	3,05E-02	CTGF	1
Connective Tissue Development and Function	abnormal morphology	abnormal morphology of ulna	3,05E-02	CTGF	1
Embryonic Development	abnormal morphology	abnormal morphology of ulna	3,05E-02	CTGF	1

Organ Development	abnormal morphology	abnormal morphology of ulna	3,05E-02	CTGF	1
Organismal Development	abnormal morphology	abnormal morphology of ulna	3,05E-02	CTGF	1
Skeletal and Muscular System Development and Function	abnormal morphology	abnormal morphology of ulna	3,05E-02	CTGF	1
Tissue Development	abnormal morphology	abnormal morphology of ulna	3,05E-02	CTGF	1
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of embryonic cell lines	3,05E-02	C3	1
Embryonic Development	adhesion	adhesion of embryonic cell lines	3,05E-02	C3	1
Tissue Development	adhesion	adhesion of embryonic cell lines	3,05E-02	C3	1
Neurological Disease	age-related macular degeneration	age-related macular degeneration	3,05E-02	C3	1
Ophthalmic Disease	age-related macular degeneration	age-related macular degeneration	3,05E-02	C3	1
Infectious Disease	dengue hemorrhagic fever	dengue hemorrhagic fever	3,05E-02	C3	1
Neurological Disease	febrile seizure	febrile seizure	3,05E-02	PCOLCE2 (includes EG:26577)	1
Organismal Injury and Abnormalities	formation	formation of thrombus	3,05E-02	C3	1
Cardiovascular Disease	formation	formation of thrombus	3,05E-02	C3	1
Developmental Disorder	hypoplasia	hypoplasia of lung	3,05E-02	CTGF	1
Respiratory Disease	hypoplasia	hypoplasia of lung	3,05E-02	CTGF	1
Inflammatory Response	inflammation	inflammation of brain	3,05E-02	C3	1
Connective Tissue Development and Function	ossification	ossification of endochondral bone	3,05E-02	CTGF	1
Embryonic Development	ossification	ossification of endochondral bone	3,05E-02	CTGF	1
Organ Development	ossification	ossification of endochondral bone	3,05E-02	CTGF	1
Organismal Development	ossification	ossification of endochondral bone	3,05E-02	CTGF	1
Skeletal and Muscular System Development and Function	ossification	ossification of endochondral bone	3,05E-02	CTGF	1
Tissue Development	ossification	ossification of endochondral bone	3,05E-02	CTGF	1
Lymphoid Tissue Structure and Development	size	size of germinal center	3,05E-02	C3	1
Humoral Immune Response	size	size of germinal center	3,05E-02	C3	1
Small Molecule Biochemistry	synthesis	synthesis of proteoglycan	3,05E-02	CTGF	1
Carbohydrate Metabolism	synthesis	synthesis of proteoglycan	3,05E-02	CTGF	1
Cardiovascular System Development and Function	vasculogenesis	vasculogenesis	3,09E-02	C3,CTGF,CYR61	3
Organismal Development	vasculogenesis	vasculogenesis	3,09E-02	C3,CTGF,CYR61	3
Lipid Metabolism	concentration	concentration of triacylglycerol	3,12E-02	C3,EGR1	2
Molecular Transport	concentration	concentration of triacylglycerol	3,12E-02	C3,EGR1	2
Small Molecule Biochemistry	concentration	concentration of triacylglycerol	3,12E-02	C3,EGR1	2
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of fibroblasts	3,15E-02	CTGF	1
Connective Tissue Development and Function	adhesion	adhesion of fibroblasts	3,15E-02	CTGF	1
Tissue Development	adhesion	adhesion of fibroblasts	3,15E-02	CTGF	1
Organ Morphology	volume	volume of trabecular bone	3,15E-02	CTGF	1
Skeletal and Muscular System Development and Function	volume	volume of trabecular bone	3,15E-02	CTGF	1
Cancer	uterine serous papillary cancer	uterine serous papillary cancer	3,23E-02	CLDN5,ISG15	2
Reproductive System Disease	uterine serous papillary cancer	uterine serous papillary cancer	3,23E-02	CLDN5,ISG15	2
Organ Morphology	abnormal morphology	abnormal morphology of long bone hypertrophic chondrocyte zone	3,25E-02	CTGF	1
Connective Tissue Development and Function	abnormal morphology	abnormal morphology of long bone hypertrophic chondrocyte zone	3,25E-02	CTGF	1
Embryonic Development	abnormal morphology	abnormal morphology of long bone hypertrophic chondrocyte zone	3,25E-02	CTGF	1
Organ Development	abnormal morphology	abnormal morphology of long bone hypertrophic chondrocyte zone	3,25E-02	CTGF	1
Organismal Development	abnormal morphology	abnormal morphology of long bone hypertrophic chondrocyte zone	3,25E-02	CTGF	1
Skeletal and Muscular System Development and Function	abnormal morphology	abnormal morphology of long bone hypertrophic chondrocyte zone	3,25E-02	CTGF	1
Tissue Development	abnormal morphology	abnormal morphology of long bone hypertrophic chondrocyte zone	3,25E-02	CTGF	1
Tissue Morphology	abnormal morphology	abnormal morphology of long bone hypertrophic chondrocyte zone	3,25E-02	CTGF	1
Hematological System Development and Function	migration	migration of leukocyte cell lines	3,25E-02	C3	1
Cellular Movement	migration	migration of leukocyte cell lines	3,25E-02	C3	1
Immune Cell Trafficking	migration	migration of leukocyte cell lines	3,25E-02	C3	1
Cell Morphology	tubulation	tubulation of vascular endothelial cells	3,25E-02	CYR61	1
Cardiovascular System Development and Function	tubulation	tubulation of vascular endothelial cells	3,25E-02	CYR61	1
Cellular Development	tubulation	tubulation of vascular endothelial cells	3,25E-02	CYR61	1
Organismal Development	tubulation	tubulation of vascular endothelial cells	3,25E-02	CYR61	1
Tissue Development	tubulation	tubulation of vascular endothelial cells	3,25E-02	CYR61	1
Organ Morphology	abnormal morphology	abnormal morphology of cornea	3,36E-02	EGR1	1
Embryonic Development	abnormal morphology	abnormal morphology of cornea	3,36E-02	EGR1	1
Organ Development	abnormal morphology	abnormal morphology of cornea	3,36E-02	EGR1	1
Organismal Development	abnormal morphology	abnormal morphology of cornea	3,36E-02	EGR1	1
Tissue Development	abnormal morphology	abnormal morphology of cornea	3,36E-02	EGR1	1
Visual System Development and Function	abnormal morphology	abnormal morphology of cornea	3,36E-02	EGR1	1
Skeletal and Muscular System Development and Function	abnormal morphology	abnormal morphology of rib cage	3,36E-02	CTGF	1
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of epithelial cell lines	3,36E-02	C3	1
Tissue Development	adhesion	adhesion of epithelial cell lines	3,36E-02	C3	1
Hair and Skin Development and Function	adhesion	adhesion of epithelial cell lines	3,36E-02	C3	1
Organ Morphology	lack	lack of corpus luteum	3,36E-02	EGR1	1
Reproductive System Development and Function	lack	lack of corpus luteum	3,36E-02	EGR1	1
Cellular Growth and Proliferation	proliferation	proliferation of myeloma cell lines	3,36E-02	SGK1	1
Cellular Development	proliferation	proliferation of myeloma cell lines	3,36E-02	SGK1	1
Tissue Morphology	area	area of atherosclerotic lesion	3,46E-02	EGR1	1
Organismal Injury and Abnormalities	area	area of atherosclerotic lesion	3,46E-02	EGR1	1
Cardiovascular Disease	area	area of atherosclerotic lesion	3,46E-02	EGR1	1
Immunological Disease	lymphadenopathy	lymphadenopathy	3,46E-02	C3	1
Hematological System Development and Function	phagocytosis	phagocytosis of neutrophils	3,46E-02	C3	1
Inflammatory Response	phagocytosis	phagocytosis of neutrophils	3,46E-02	C3	1
Cell-To-Cell Signaling and Interaction	phagocytosis	phagocytosis of neutrophils	3,46E-02	C3	1
Cellular Function and Maintenance	phagocytosis	phagocytosis of neutrophils	3,46E-02	C3	1
Antigen Presentation	phagocytosis	phagocytosis of neutrophils	3,46E-02	C3	1
Gastrointestinal Disease	primary sclerosing cholangitis	primary sclerosing cholangitis	3,46E-02	CTGF	1
Hepatic System Disease	primary sclerosing cholangitis	primary sclerosing cholangitis	3,46E-02	CTGF	1
Inflammatory Disease	primary sclerosing cholangitis	primary sclerosing cholangitis	3,46E-02	CTGF	1
Lipid Metabolism	uptake	uptake of fatty acid	3,46E-02	C3	1
Molecular Transport	uptake	uptake of fatty acid	3,46E-02	C3	1
Small Molecule Biochemistry	uptake	uptake of fatty acid	3,46E-02	C3	1
Hematological System Development and Function	adhesion	adhesion of blood platelets	3,56E-02	C3	1
Inflammatory Response	adhesion	adhesion of blood platelets	3,56E-02	C3	1
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of blood platelets	3,56E-02	C3	1
Tissue Development	adhesion	adhesion of blood platelets	3,56E-02	C3	1
Endocrine System Development and Function	concentration	concentration of aldosterone	3,56E-02	SGK1	1
Lipid Metabolism	concentration	concentration of aldosterone	3,56E-02	SGK1	1

Molecular Transport	concentration	concentration of aldosterone	3,56E-02	SGK1	1
Small Molecule Biochemistry	concentration	concentration of aldosterone	3,56E-02	SGK1	1
Hematological System Development and Function	priming	priming of T lymphocytes	3,56E-02	C3	1
Inflammatory Response	priming	priming of T lymphocytes	3,56E-02	C3	1
Cell-To-Cell Signaling and Interaction	priming	priming of T lymphocytes	3,56E-02	C3	1
Immune Cell Trafficking	priming	priming of T lymphocytes	3,56E-02	C3	1
Lymphoid Tissue Structure and Development	quantity	quantity of germinal center	3,56E-02	C3	1
Humoral Immune Response	quantity	quantity of germinal center	3,56E-02	C3	1
Hematological System Development and Function	respiratory burst	respiratory burst of neutrophils	3,56E-02	C3	1
Inflammatory Response	respiratory burst	respiratory burst of neutrophils	3,56E-02	C3	1
Cellular Compromise	respiratory burst	respiratory burst of neutrophils	3,56E-02	C3	1
Cell-To-Cell Signaling and Interaction	respiratory burst	respiratory burst of neutrophils	3,56E-02	C3	1
Cellular Function and Maintenance	respiratory burst	respiratory burst of neutrophils	3,56E-02	C3	1
Antigen Presentation	respiratory burst	respiratory burst of neutrophils	3,56E-02	C3	1
Cell Death	apoptosis	apoptosis of fibroblast cell lines	3,69E-02	CYR61, EGR1	2
Organ Morphology	abnormal morphology	abnormal morphology of skull	3,67E-02	CTGF	1
Connective Tissue Development and Function	abnormal morphology	abnormal morphology of skull	3,67E-02	CTGF	1
Embryonic Development	abnormal morphology	abnormal morphology of skull	3,67E-02	CTGF	1
Organ Development	abnormal morphology	abnormal morphology of skull	3,67E-02	CTGF	1
Organismal Development	abnormal morphology	abnormal morphology of skull	3,67E-02	CTGF	1
Skeletal and Muscular System Development and Function	abnormal morphology	abnormal morphology of skull	3,67E-02	CTGF	1
Tissue Development	abnormal morphology	abnormal morphology of skull	3,67E-02	CTGF	1
Hematological System Development and Function	activation	activation of neutrophils	3,67E-02	C3	1
Inflammatory Response	activation	activation of neutrophils	3,67E-02	C3	1
Cell-To-Cell Signaling and Interaction	activation	activation of neutrophils	3,67E-02	C3	1
Immune Cell Trafficking	activation	activation of neutrophils	3,67E-02	C3	1
Antigen Presentation	activation	activation of neutrophils	3,67E-02	C3	1
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of kidney cell lines	3,67E-02	C3	1
Tissue Development	adhesion	adhesion of kidney cell lines	3,67E-02	C3	1
Renal and Urological System Development and Function	adhesion	adhesion of kidney cell lines	3,67E-02	C3	1
Tissue Morphology	abnormal morphology	abnormal morphology of sternbrae	3,77E-02	CTGF	1
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of fibroblast cell lines	3,77E-02	CTGF	1
Connective Tissue Development and Function	adhesion	adhesion of fibroblast cell lines	3,77E-02	CTGF	1
Tissue Development	adhesion	adhesion of fibroblast cell lines	3,77E-02	CTGF	1
Skeletal and Muscular Disorders	muscle weakness	muscle weakness	3,77E-02	C3	1
Endocrine System Development and Function	quantity	quantity of LH	3,77E-02	EGR1	1
Molecular Transport	quantity	quantity of LH	3,77E-02	EGR1	1
Small Molecule Biochemistry	quantity	quantity of LH	3,77E-02	EGR1	1
Molecular Transport	quantity	quantity of bilirubin	3,77E-02	C3	1
Small Molecule Biochemistry	quantity	quantity of bilirubin	3,77E-02	C3	1
Cardiovascular Disease	vascular disease	vascular disease	3,79E-02	C3,CTGF,EGR1	3
Organ Morphology	abnormal morphology	abnormal morphology of placental spongictrophoblast layer	3,87E-02	C3	1
Reproductive System Development and Function	abnormal morphology	abnormal morphology of placental spongictrophoblast layer	3,87E-02	C3	1
Inflammatory Response	autoimmune response	autoimmune response	3,87E-02	C3	1
Hematological System Development and Function	chemotaxis	chemotaxis of leukocyte cell lines	3,87E-02	C3	1
Cellular Movement	chemotaxis	chemotaxis of leukocyte cell lines	3,87E-02	C3	1
Immune Cell Trafficking	chemotaxis	chemotaxis of leukocyte cell lines	3,87E-02	C3	1
Cellular Growth and Proliferation	colony formation	colony formation of lung cancer cell lines	3,87E-02	CYR61	1
Cellular Development	differentiation	differentiation of germ cell tumor cell lines	3,87E-02	EGR1	1
Cellular Assembly and Organization	rearrangement	rearrangement of cytoskeleton	3,87E-02	CTGF	1
Infectious Disease	replication	replication of Hepatitis C virus	3,87E-02	ISG15	1
Hematological System Development and Function	proliferation	proliferation of lymphocytes	3,88E-02	C3,EGR1,ISG15	3
Cellular Growth and Proliferation	proliferation	proliferation of lymphocytes	3,88E-02	C3,EGR1,ISG15	3
Cellular Development	proliferation	proliferation of lymphocytes	3,88E-02	C3,EGR1,ISG15	3
Neurological Disease	seizures	seizures	3,90E-02	C3,PCOLCE2 (includes EG-26577)	2
Visual System Development and Function	vision	vision	3,98E-02	EGR1	1
Cancer	leiomyomatosis	leiomyomatosis	3,99E-02	CTGF,CYR61	2
Organ Morphology	abnormal morphology	abnormal morphology of long bones	4,08E-02	CTGF	1
Connective Tissue Development and Function	abnormal morphology	abnormal morphology of long bones	4,08E-02	CTGF	1
Embryonic Development	abnormal morphology	abnormal morphology of long bones	4,08E-02	CTGF	1
Organ Development	abnormal morphology	abnormal morphology of long bones	4,08E-02	CTGF	1
Organismal Development	abnormal morphology	abnormal morphology of long bones	4,08E-02	CTGF	1
Skeletal and Muscular System Development and Function	abnormal morphology	abnormal morphology of long bones	4,08E-02	CTGF	1
Tissue Development	abnormal morphology	abnormal morphology of long bones	4,08E-02	CTGF	1
Lipid Metabolism	absorption	absorption of lipid	4,08E-02	C3	1
Molecular Transport	absorption	absorption of lipid	4,08E-02	C3	1
Small Molecule Biochemistry	absorption	absorption of lipid	4,08E-02	C3	1
Cardiovascular System Development and Function	neovascularization	neovascularization of retina	4,08E-02	C3	1
Organismal Development	neovascularization	neovascularization of retina	4,08E-02	C3	1
Visual System Development and Function	neovascularization	neovascularization of retina	4,08E-02	C3	1
Cellular Function and Maintenance	function	function of phagocytes	4,17E-02	C3,EGR1	2
Organ Morphology	abnormal morphology	abnormal morphology of dermis	4,18E-02	EGR1	1
Lipid Metabolism	synthesis	synthesis of triacylglycerol	4,18E-02	C3	1
Small Molecule Biochemistry	synthesis	synthesis of triacylglycerol	4,18E-02	C3	1
Organ Morphology	thickness	thickness of trabecular bone	4,18E-02	CTGF	1
Skeletal and Muscular System Development and Function	thickness	thickness of trabecular bone	4,18E-02	CTGF	1
Carbohydrate Metabolism	synthesis	synthesis of carbohydrate	4,24E-02	CTGF,Mup1 (includes others)	2
Hematological System Development and Function	function	function of blood platelets	4,28E-02	C3	1
Cellular Function and Maintenance	function	function of blood platelets	4,28E-02	C3	1
Cellular Growth and Proliferation	proliferation	proliferation of chondrocytes	4,28E-02	CTGF	1
Cellular Development	proliferation	proliferation of chondrocytes	4,28E-02	CTGF	1
Connective Tissue Development and Function	proliferation	proliferation of chondrocytes	4,28E-02	CTGF	1
Hematological System Development and Function	quantity	quantity of mast cells	4,28E-02	C3	1
Inflammatory Response	quantity	quantity of mast cells	4,28E-02	C3	1
Tissue Morphology	quantity	quantity of mast cells	4,28E-02	C3	1
Hypersensitivity Response	quantity	quantity of mast cells	4,28E-02	C3	1
Small Molecule Biochemistry	synthesis	synthesis of D-glucose	4,28E-02	Mup1 (includes others)	1
Carbohydrate Metabolism	synthesis	synthesis of D-glucose	4,28E-02	Mup1 (includes others)	1
Cancer	tumorigenesis	tumorigenesis of papilloma	4,28E-02	EGR1	1

Dermatological Diseases and Conditions	tumorigenesis	tumorigenesis of papilloma	4,28E-02	EGR1	1
Hematological Disease	anemia	anemia	4,34E-02	C3,EGR1	2
Infectious Disease	replication	replication of Influenza A virus	4,34E-02	ISG15,SGK1	2
Hematological System Development and Function	accumulation	accumulation of neutrophils	4,39E-02	EGR1	1
Inflammatory Response	accumulation	accumulation of neutrophils	4,39E-02	EGR1	1
Tissue Development	accumulation	accumulation of neutrophils	4,39E-02	EGR1	1
Immune Cell Trafficking	accumulation	accumulation of neutrophils	4,39E-02	EGR1	1
Hematological System Development and Function	differentiation	differentiation of thymocytes	4,39E-02	EGR1	1
Cellular Development	differentiation	differentiation of thymocytes	4,39E-02	EGR1	1
Hematopoiesis	differentiation	differentiation of thymocytes	4,39E-02	EGR1	1
Lymphoid Tissue Structure and Development	differentiation	differentiation of thymocytes	4,39E-02	EGR1	1
Cell-mediated Immune Response	differentiation	differentiation of thymocytes	4,39E-02	EGR1	1
Cellular Function and Maintenance	differentiation	differentiation of thymocytes	4,39E-02	EGR1	1
Cellular Function and Maintenance	homeostasis	cellular homeostasis	4,39E-02	C3,EGR1,Mup1 (includes others),SGK1	4
Cell Morphology	branching	branching of endothelial cells	4,49E-02	CYR61	1
Cardiovascular System Development and Function	branching	branching of endothelial cells	4,49E-02	CYR61	1
Cellular Development	branching	branching of endothelial cells	4,49E-02	CYR61	1
Organismal Development	branching	branching of endothelial cells	4,49E-02	CYR61	1
Cellular Function and Maintenance	function	function of mast cells	4,49E-02	C3	1
Hypersensitivity Response	function	function of mast cells	4,49E-02	C3	1
Organismal Injury and Abnormalities	atrophy	atrophy of thymus gland	4,59E-02	EGR1	1
Immunological Disease	atrophy	atrophy of thymus gland	4,59E-02	EGR1	1
Drug Metabolism	concentration	concentration of progesterone	4,59E-02	EGR1	1
Endocrine System Development and Function	concentration	concentration of progesterone	4,59E-02	EGR1	1
Lipid Metabolism	concentration	concentration of progesterone	4,59E-02	EGR1	1
Molecular Transport	concentration	concentration of progesterone	4,59E-02	EGR1	1
Small Molecule Biochemistry	concentration	concentration of progesterone	4,59E-02	EGR1	1
Protein Synthesis	quantity	quantity of GPT in blood	4,59E-02	C3	1
Cardiovascular Disease	vasculitis	vasculitis	4,59E-02	C3	1
Inflammatory Disease	vasculitis	vasculitis	4,59E-02	C3	1
Lipid Metabolism	concentration	concentration of lipid	4,61E-02	C3,EGR1,SGK1	3
Molecular Transport	concentration	concentration of lipid	4,61E-02	C3,EGR1,SGK1	3
Small Molecule Biochemistry	concentration	concentration of lipid	4,61E-02	C3,EGR1,SGK1	3
Cellular Assembly and Organization	development	development of cytoplasm	4,62E-02	CTGF,Mup1 (includes others)	2
Organ Morphology	abnormal morphology	abnormal morphology of tibia	4,69E-02	CTGF	1
Connective Tissue Development and Function	abnormal morphology	abnormal morphology of tibia	4,69E-02	CTGF	1
Embryonic Development	abnormal morphology	abnormal morphology of tibia	4,69E-02	CTGF	1
Organ Development	abnormal morphology	abnormal morphology of tibia	4,69E-02	CTGF	1
Organismal Development	abnormal morphology	abnormal morphology of tibia	4,69E-02	CTGF	1
Skeletal and Muscular System Development and Function	abnormal morphology	abnormal morphology of tibia	4,69E-02	CTGF	1
Tissue Development	abnormal morphology	abnormal morphology of tibia	4,69E-02	CTGF	1
Neurological Disease	chronic fatigue syndrome	chronic fatigue syndrome	4,69E-02	C3	1
Lipid Metabolism	storage	storage of lipid	4,69E-02	Mup1 (includes others)	1
Small Molecule Biochemistry	storage	storage of lipid	4,69E-02	Mup1 (includes others)	1
Organismal Injury and Abnormalities	injury	injury of mice	4,79E-02	C3	1
Cancer	tumorigenesis	tumorigenesis of thymic lymphoma	4,79E-02	EGR1	1
Immunological Disease	tumorigenesis	tumorigenesis of thymic lymphoma	4,79E-02	EGR1	1
Hematological Disease	tumorigenesis	tumorigenesis of thymic lymphoma	4,79E-02	EGR1	1
Embryonic Development	abnormal morphology	abnormal morphology of germinal center	4,90E-02	C3	1
Lymphoid Tissue Structure and Development	abnormal morphology	abnormal morphology of germinal center	4,90E-02	C3	1
Organ Development	abnormal morphology	abnormal morphology of germinal center	4,90E-02	C3	1
Organismal Development	abnormal morphology	abnormal morphology of germinal center	4,90E-02	C3	1
Tissue Development	abnormal morphology	abnormal morphology of germinal center	4,90E-02	C3	1
Humoral Immune Response	abnormal morphology	abnormal morphology of germinal center	4,90E-02	C3	1
Developmental Disorder	chondrodysplasia	chondrodysplasia	4,90E-02	CTGF	1
Skeletal and Muscular Disorders	chondrodysplasia	chondrodysplasia	4,90E-02	CTGF	1
Hereditary Disorder	chondrodysplasia	chondrodysplasia	4,90E-02	CTGF	1
Connective Tissue Disorders	chondrodysplasia	chondrodysplasia	4,90E-02	CTGF	1
Carbohydrate Metabolism	gluconeogenesis	gluconeogenesis	4,90E-02	Mup1 (includes others)	1
Molecular Transport	transport	transport of Na+	4,90E-02	SGK1	1
Cell Death	apoptosis	apoptosis of breast cell lines	5,00E-02	SGK1	1
Cell Death	clearance	clearance of cells	5,00E-02	C3	1
Cellular Function and Maintenance	clearance	clearance of cells	5,00E-02	C3	1
Cancer	pancreatic adenocarcinoma	pancreatic adenocarcinoma	5,00E-02	CYR61	1
Gastrointestinal Disease	pancreatic adenocarcinoma	pancreatic adenocarcinoma	5,00E-02	CYR61	1
Hereditary Disorder	pancreatic adenocarcinoma	pancreatic adenocarcinoma	5,00E-02	CYR61	1
Endocrine System Disorders	pancreatic adenocarcinoma	pancreatic adenocarcinoma	5,00E-02	CYR61	1

A_52_P100926	IL1A	interleukin 1, alpha	-1,760	4,00E-06
A_51_P161946	C17orf96	chromosome 17 open reading frame 96	-1,754	4,35E-07
A_52_P63680	ACER1	alkaline ceramidase 1	1,749	9,52E-05
A_51_P301804	ST3GAL1	ST3 beta-galactosidase alpha-2,3-sialyltransferase 1	-1,748	5,64E-08
A_52_P296913	CNMM1	cyclin M1	1,748	1,62E-05
A_51_P173043	EGR2	early growth response 2	-1,747	4,90E-10
A_51_P488196	BMPER	BMP binding endothelial regulator	-1,744	4,69E-08
A_51_P268931	SLC2A6	solute carrier family 2 (facilitated glucose transporter), member 6	-1,734	2,55E-07
A_51_P122321	IL33	interleukin 33	-1,732	4,41E-06
A_51_P123630	IRG1	immunoresponsive 1 homolog (mouse)	-1,729	7,67E-03
A_52_P851352	IGFBP3	insulin-like growth factor binding protein 3	-1,728	2,43E-07
A_52_P425839	RETNLB	resistin like beta	-1,727	5,78E-03
A_52_P680627	ABAT	4-aminobutyrate aminotransferase	1,721	6,55E-07
A_51_P356467	CLDN4	claudin 4	-1,720	1,57E-07
A_52_P68883	DEFB103A/DEFB103B	defensin, beta 103B	-1,719	2,99E-06
A_51_P174961	F10	coagulation factor X	-1,712	2,98E-06
A_51_P461665	CXCL9	chemokine (C-X-C motif) ligand 9	-1,710	2,39E-07
A_51_P240857	CHPT1	choline phosphotransferase 1	1,710	7,59E-09
A_51_P494293	9130024F11Rik	RIKEN cDNA 9130024F11 gene	1,706	2,27E-07
A_51_P398260	TPPP	tubulin polymerization promoting protein	1,705	4,43E-07
A_51_P204486	EXOC3L4	exocyst complex component 3-like 4	-1,700	3,33E-04
A_51_P386648	GLOD5	glyoxalase domain containing 5	1,699	7,33E-08
A_51_P511270	POLJF1	POU class 3 homeobox 1	-1,697	2,83E-06
A_51_P455326	SELE (includes EG.20339)	selectin E	-1,689	4,15E-08
A_52_P32453	1110020A21Rik	RIKEN cDNA 1110020A21 gene	1,689	3,50E-08
A_52_P504254	ADTRP	androgen-dependent TFPI-regulating protein	1,688	1,53E-05
A_51_P216550	TP63	tumor protein p63	-1,687	3,92E-05
A_51_P420547	CLIC5	chloride intracellular channel 5	1,686	2,91E-07
A_51_P277994	OAS2	2'-5'-oligoadenylate synthetase 2, 69/71kDa	-1,684	6,43E-07
A_51_P391955	DAPL1	death associated protein-like 1	-1,683	1,48E-09
A_52_P161488	CLEC4E	C-type lectin domain family 4, member E	-1,681	9,26E-05
A_51_P452768	CYP4F12	cytochrome P450, family 4, subfamily F, polypeptide 12	1,680	4,29E-07
A_52_P326664	UNC93A	unc-93 homolog A (C. elegans)	-1,673	1,06E-08
A_51_P410205	HSD11B2	hydroxysteroid (11-beta) dehydrogenase 2	1,673	1,17E-05
A_52_P48569	SLC38A4	solute carrier family 38, member 4	-1,671	4,63E-05
A_51_P300493	LOX	lysyl oxidase	-1,666	3,98E-09
A_51_P316902	SVOPL	SVOP-like	1,665	2,98E-06
A_52_P578732	CCRS	chemokine (C-C motif) receptor 5 (gene/pseudogene)	-1,662	4,92E-07
A_51_P260312	CSGALNACT1	chondroitin sulfate N-acetylgalactosaminyltransferase 1	-1,657	1,06E-08
A_52_P63232	TFCP2L1	transcription factor CP2-like 1	1,651	1,07E-06
A_51_P436567	Cox2b/Cox2c	carboxylesterase 2C	1,650	4,05E-07
A_52_P423814	Cox8b	cytochrome c oxidase, subunit VIIIb	1,650	2,59E-07
A_52_P137104	PRR15	proline rich 15	1,648	2,40E-08
A_51_P268673	2210016H18Rik	RIKEN cDNA 2210016H18 gene	1,644	4,07E-07
A_51_P498293	FAM84A	family with sequence similarity 84, member A	-1,643	1,06E-08
A_52_P347176	NAT8L	N-acetyltransferase 8-like (GCN5-related, putative)	-1,642	9,65E-08
A_51_P132185	Staf1 (includes others)	stafin A1	-1,642	7,48E-07
A_52_P535195	GPBP1L1	GC-rich promoter binding protein 1-like 1	-1,639	2,42E-07
A_51_P438853	SERPINB11	serpin peptidase inhibitor, clade B (ovalbumin), member 11 (gene/pseudogene)	-1,630	7,90E-07
A_51_P117581	CABLES1	Cdk5 and Abl enzyme substrate 1	1,630	2,26E-09
A_51_P278368	DNER	delta/notch-like EGF repeat containing	1,626	1,77E-07
A_51_P340170	IL20RA	interleukin 20 receptor, alpha	-1,624	2,06E-08
A_51_P352875	LCP2	lymphocytic cytosolic protein 2 (SH2 domain containing leukocyte protein of 76kDa)	-1,623	8,28E-08
A_51_P305896	CFTF	cystic fibrosis transmembrane conductance regulator (ATP-binding cassette sub-family C, member 7)	1,622	2,27E-06
A_51_P482121	EDN2	endothelin 2	1,617	2,72E-08
A_51_P282930	RORC	RAR-related orphan receptor C	1,613	9,53E-07
A_52_P237077	ESR1	estrogen receptor 1	-1,612	1,33E-07
A_51_P354838	KRT75	keratin 75	-1,612	7,47E-09
A_51_P255473	OR5K1	olfactory receptor, family 5, subfamily K, member 1	1,608	1,34E-03
A_51_P263471	CLEC6A	C-type lectin domain family 6, member A	-1,604	1,06E-09
A_52_P507214	MMP9	matrix metalloproteinase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase)	-1,604	7,59E-07
A_51_P309307	BCL2L15	BCL2-like 15	-1,603	1,62E-05
A_51_P297925	ZC3H12A	zinc finger CCHH-type containing 12A	-1,602	2,13E-07
A_51_P255395	COL7A1	collagen, type VII, alpha 1	-1,601	4,44E-08

Hematological System Development and Function	chemotaxis	chemotaxis of granulocytes	1.02E-06	CAMP (includes EG:12796),Chi3/3/Chi3/4,CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),SELL	7
Immune Cell Trafficking	chemotaxis	chemotaxis of granulocytes	1.02E-06	CAMP (includes EG:12796),Chi3/3/Chi3/4,CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),SELL	7
Inflammatory Response	chemotaxis of granulocytes	chemotaxis of granulocytes	1.02E-06	CAMP (includes EG:12796),Chi3/3/Chi3/4,CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),SELL	7
Cellular Movement	cell movement	cell movement of lymphocytes	1.03E-06	CAMP (includes EG:12796),Chi3/3/Chi3/4,CXCL10,CXCL9,IFNG (includes EG:15978),IL6,PTGS2,SELL,ZC3H12A	9
Hematological System Development and Function	cell movement	cell movement of lymphocytes	1.03E-06	CAMP (includes EG:12796),Chi3/3/Chi3/4,CXCL10,CXCL9,IFNG (includes EG:15978),IL6,PTGS2,SELL,ZC3H12A	9
Immune Cell Trafficking	cell movement	cell movement of lymphocytes	1.03E-06	CAMP (includes EG:12796),Chi3/3/Chi3/4,CXCL10,CXCL9,IFNG (includes EG:15978),IL6,PTGS2,SELL,ZC3H12A	9
Hematological System Development and Function	binding	binding of leukocytes	1.05E-06	CAMP (includes EG:12796),Chi3/3/Chi3/4,CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),MARCO,PTPRC,SELL	7
Cell-To-Cell Signaling and Interaction	inflammation	inflammation of central nervous system	1.05E-06	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),MARCO,PTPRC,SELL	7
Inflammatory Response	psoriasis	psoriasis	1.06E-06	CXCL10,IFNG (includes EG:15978),PTGS2,PTPRC	7
Dermatological Diseases and Conditions	psoriasis	psoriasis	1.13E-06	CAMP (includes EG:12796),CSTA,CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,LCE3D,PM20D1,PTGS2,PTPRC	11
Cell-To-Cell Signaling and Interaction	binding	binding of tumor cell lines	1.23E-06	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,SELL	7
Inflammatory Response	inflammatory response	inflammatory response	1.26E-06	CAMP (includes EG:12796),Chi3/3/Chi3/4,CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,MARCO,MMP8,PTGS2,PTPRC,SELL	12
Cardiovascular System Development and Function	systolic pressure	systolic pressure of right ventricle	1.38E-06	ACE2 (includes EG:302668),IL6,PTGS2	3
Cellular Movement	chemotaxis	chemotaxis of myeloid cells	1.43E-06	CAMP (includes EG:12796),Chi3/3/Chi3/4,CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),PTPRC,SELL	8
Hematological System Development and Function	chemotaxis	chemotaxis of myeloid cells	1.43E-06	CAMP (includes EG:12796),Chi3/3/Chi3/4,CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),PTPRC,SELL	8
Immune Cell Trafficking	chemotaxis	chemotaxis of myeloid cells	1.43E-06	CAMP (includes EG:12796),Chi3/3/Chi3/4,CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),PTPRC,SELL	8
Inflammatory Response	chemotaxis	chemotaxis of myeloid cells	1.43E-06	CAMP (includes EG:12796),Chi3/3/Chi3/4,CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),PTPRC,SELL	8
Lipid Metabolism	conversion	conversion of lipid	1.48E-06	Akr1c14,CFTR,CYP2C19,HPGD,IFNG (includes EG:15978),IL6,PTGS2	7
Small Molecule Biochemistry	conversion	conversion of lipid	1.48E-06	Akr1c14,CFTR,CYP2C19,HPGD,IFNG (includes EG:15978),IL6,PTGS2	7
Humoral Immune Response	quantity	quantity of immunoglobulin	1.64E-06	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,MARCO,PTGS2,ZC3H12A	8
Protein Synthesis	quantity	quantity of immunoglobulin	1.64E-06	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,MARCO,PTGS2,ZC3H12A	8
Infectious Disease	tuberculosis	tuberculosis	1.88E-06	CAMP (includes EG:12796),CXCL9,CXCR2,IFNG (includes EG:15978),IL6	5
Cellular Movement	chemotaxis	chemotaxis of cells	1.91E-06	CAMP (includes EG:12796),Chi3/3/Chi3/4,CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,PTGS2,PTPRC,SELL	10
Hematological System Development and Function	activation	activation of phagocytes	2.35E-06	CAMP (includes EG:12796),CXCL10,CXCR2,FOXA2,IFNG (includes EG:15978),IL6,PTGS2,SELL	8
Immune Cell Trafficking	activation	activation of phagocytes	2.35E-06	CAMP (includes EG:12796),CXCL10,CXCR2,FOXA2,IFNG (includes EG:15978),IL6,PTGS2,SELL	8
Inflammatory Response	activation	activation of phagocytes	2.35E-06	CAMP (includes EG:12796),CXCL10,CXCR2,FOXA2,IFNG (includes EG:15978),IL6,PTGS2,SELL	8
Cell-To-Cell Signaling and Interaction	activation	activation of phagocytes	2.35E-06	CAMP (includes EG:12796),CXCL10,CXCR2,FOXA2,IFNG (includes EG:15978),IL6,PTGS2,SELL	8
Inflammatory Response	inflammation	inflammation of organ	2.68E-06	CAMP (includes EG:12796),CFTR,Chi3/3/Chi3/4,CXCR2,FOXA2,HPGD,IFNG (includes EG:15978),IL6,MS4A1,PTGS2,PTPRC,SELL	12
Nutritional Disease	body mass index	body mass index	2.86E-06	ACSM3,APOB,FABP2,IL6,PPARGC1A	5
Cellular Movement	chemotaxis	chemotaxis of eosinophils	3.12E-06	CAMP (includes EG:12796),Chi3/3/Chi3/4,CXCL10,CXCL9	4
Hematological System Development and Function	chemotaxis	chemotaxis of eosinophils	3.12E-06	CAMP (includes EG:12796),Chi3/3/Chi3/4,CXCL10,CXCL9	4
Immune Cell Trafficking	chemotaxis	chemotaxis of eosinophils	3.12E-06	CAMP (includes EG:12796),Chi3/3/Chi3/4,CXCL10,CXCL9	4
Inflammatory Response	chemotaxis	chemotaxis of eosinophils	3.12E-06	CAMP (includes EG:12796),Chi3/3/Chi3/4,CXCL10,CXCL9	4
Hypersensitivity Response	chemotaxis	chemotaxis of eosinophils	3.12E-06	CAMP (includes EG:12796),Chi3/3/Chi3/4,CXCL10,CXCL9	4
Connective Tissue Development and Function	formation	formation of granulation tissue	3.61E-06	IFNG (includes EG:15978),IL6,SELL	3
Tissue Development	formation	formation of granulation tissue	3.61E-06	IFNG (includes EG:15978),IL6,SELL	3
Hematological System Development and Function	function	function of myeloid cells	3.65E-06	CXCL10,CXCR2,IFNG (includes EG:15978),IL6,MARCO,PTGS2,SELL	7
Cellular Function and Maintenance	function	function of myeloid cells	3.65E-06	CXCL10,CXCR2,IFNG (includes EG:15978),IL6,MARCO,PTGS2,SELL	7
Cell Death and Survival	cell death	cell death of macrophage cancer cell lines	3.82E-06	CAMP (includes EG:12796),IFNG (includes EG:15978),PTPRC,ZC3H12A	4
Cellular Movement	recruitment	recruitment of neutrophils	4.46E-06	CAMP (includes EG:12796),CXCL10,CXCR2,IFNG (includes EG:15978),IL6,SELL	6
Hematological System Development and Function	recruitment	recruitment of neutrophils	4.46E-06	CAMP (includes EG:12796),CXCL10,CXCR2,IFNG (includes EG:15978),IL6,SELL	6
Immune Cell Trafficking	recruitment	recruitment of neutrophils	4.46E-06	CAMP (includes EG:12796),CXCL10,CXCR2,IFNG (includes EG:15978),IL6,SELL	6
Inflammatory Response	recruitment	recruitment of neutrophils	4.46E-06	CAMP (includes EG:12796),CXCL10,CXCR2,IFNG (includes EG:15978),IL6,SELL	6
Cell-To-Cell Signaling and Interaction	recruitment	recruitment of neutrophils	4.46E-06	CAMP (includes EG:12796),CXCL10,CXCR2,IFNG (includes EG:15978),IL6,SELL	6
Organismal Functions	healing	healing of wound	4.62E-06	CXCR2,IFNG (includes EG:15978),IL6,PTGS2,SCNN1G,SELL	6
Tissue Morphology	healing	healing of wound	4.62E-06	CXCR2,IFNG (includes EG:15978),IL6,PTGS2,SCNN1G,SELL	6
Organismal Injury and Abnormalities	wound	wound	4.78E-06	CAMP (includes EG:12796),CXCR2,IFNG (includes EG:15978),IL6,PTGS2,SELL	6
Hematological System Development and Function	accumulation	accumulation of granulocytes	4.92E-06	CXCL10,CXCL9,IFNG (includes EG:15978),MMP8,SELL	5
Immune Cell Trafficking	accumulation	accumulation of granulocytes	4.92E-06	CXCL10,CXCL9,IFNG (includes EG:15978),MMP8,SELL	5
Inflammatory Response	accumulation	accumulation of granulocytes	4.92E-06	CXCL10,CXCL9,IFNG (includes EG:15978),MMP8,SELL	5
Tissue Development	accumulation	accumulation of granulocytes	4.92E-06	CXCL10,CXCL9,IFNG (includes EG:15978),MMP8,SELL	5
Cellular Movement	migration	NK cell migration	5.10E-06	CXCL10,CXCL9,IFNG (includes EG:15978),SELL	4
Hematological System Development and Function	migration	NK cell migration	5.10E-06	CXCL10,CXCL9,IFNG (includes EG:15978),SELL	4
Immune Cell Trafficking	migration	NK cell migration	5.10E-06	CXCL10,CXCL9,IFNG (includes EG:15978),SELL	4
Cell-mediated Immune Response	migration	NK cell migration	5.10E-06	CXCL10,CXCL9,IFNG (includes EG:15978),SELL	4
Immunological Disease	hypersensitive reaction	hypersensitive reaction	5.14E-06	CXCL10,CXCL9,IFNG (includes EG:15978),SELL	4
Lipid Metabolism	concentration	concentration of lipid	5.53E-06	AADAC,ACER1,APOB,CAMP (includes EG:12796),CFTR,FABP2,FOXA2,HPGD,IFNG (includes EG:15978),IL6,PPARGC1A,PTGS2	9
Small Molecule Biochemistry	concentration	concentration of lipid	5.53E-06	AADAC,ACER1,APOB,CAMP (includes EG:12796),CFTR,FABP2,FOXA2,HPGD,IFNG (includes EG:15978),IL6,PPARGC1A,PTGS2	12
Molecular Transport	concentration	concentration of lipid	5.53E-06	AADAC,ACER1,APOB,CAMP (includes EG:12796),CFTR,FABP2,FOXA2,HPGD,IFNG (includes EG:15978),IL6,PPARGC1A,PTGS2	12
Cellular Movement	cell movement	cell movement of monocytes	5.65E-06	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6	6
Hematological System Development and Function	cell movement	cell movement of monocytes	5.65E-06	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6	6
Immune Cell Trafficking	cell movement	cell movement of monocytes	5.65E-06	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6	6
Inflammatory Response	cell movement	cell movement of monocytes	5.65E-06	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6	6
Infectious Disease	infection	infection of mammalia	5.67E-06	CAMP (includes EG:12796),CFTR,CXCL10,CXCR2,IFNG (includes EG:15978),IL6,MARCO,MMP8	8
Infectious Disease	anthrax	anthrax	5.95E-06	CXCL10,CXCL9,IFNG (includes EG:15978)	3
Dermatological Diseases and Conditions	chronic large plaque psoriasis	chronic large plaque psoriasis	5.95E-06	CXCL10,CXCL9,IFNG (includes EG:15978)	3
Dermatological Diseases and Conditions	chronic small plaque psoriasis	chronic small plaque psoriasis	5.95E-06	CXCL10,CXCL9,IFNG (includes EG:15978)	3
Organismal Injury and Abnormalities	formation	formation of vascular lesion	6.63E-06	APOB,CXCL10,IFNG (includes EG:15978),IL6,PTGS2	5
Cardiovascular Disease	formation	formation of vascular lesion	6.63E-06	APOB,CXCL10,IFNG (includes EG:15978),IL6,PTGS2	5
Cellular Movement	transmigration	transmigration of granulocytes	6.66E-06	CXCL10,CXCL9,CXCR2,IL6	4
Hematological System Development and Function	transmigration	transmigration of granulocytes	6.66E-06	CXCL10,CXCL9,CXCR2,IL6	4
Immune Cell Trafficking	transmigration	transmigration of granulocytes	6.66E-06	CXCL10,CXCL9,CXCR2,IL6	4
Gene Expression	binding	binding of LPS/IL1 response element	6.69E-06	IFNG (includes EG:15978),IL6	2
Hematological System Development and Function	function	function of macrophages	6.87E-06	CXCL10,IFNG (includes EG:15978),IL6,MARCO,PTGS2,SELL	6
Cellular Function and Maintenance	function	function of macrophages	6.87E-06	CXCL10,IFNG (includes EG:15978),IL6,MARCO,PTGS2,SELL	6
Humoral Immune Response	quantity	quantity of IgG2a	6.96E-06	CXCL10,IFNG (includes EG:15978),IL6,PTGS2,ZC3H12A	5
Protein Synthesis	quantity	quantity of IgG2a	6.96E-06	CXCL10,IFNG (includes EG:15978),IL6,PTGS2,ZC3H12A	5
Cellular Movement	cell movement	cell movement of mast cells	7.25E-06	CAMP (includes EG:12796),CFTR,CXCL10,SELL	4
Hematological System Development and Function	cell movement	cell movement of mast cells	7.25E-06	CAMP (includes EG:12796),CFTR,CXCL10,SELL	4
Immune Cell Trafficking	cell movement	cell movement of mast cells	7.25E-06	CAMP (includes EG:12796),CFTR,CXCL10,SELL	4
Inflammatory Response	cell movement	cell movement of mast cells	7.25E-06	CAMP (includes EG:12796),CFTR,CXCL10,SELL	4
Hypersensitivity Response	cell movement	cell movement of mast cells	7.25E-06	CAMP (includes EG:12796),CFTR,CXCL10,SELL	4
Cellular Movement	recruitment	recruitment of antigen presenting cells	8.01E-06	APOB,CXCL10,CXCR2,FOXA2,IFNG (includes EG:15978)	4
Hematological System Development and Function	recruitment	recruitment of antigen presenting cells	8.01E-06	APOB,CXCL10,CXCR2,FOXA2,IFNG (includes EG:15978)	5
Immune Cell Trafficking	recruitment	recruitment of antigen presenting cells	8.01E-06	APOB,CXCL10,CXCR2,FOXA2,IFNG (includes EG:15978)	5
Cell-To-Cell Signaling and Interaction	recruitment	recruitment of antigen presenting cells	8.01E-06	APOB,CXCL10,CXCR2,FOXA2,IFNG (includes EG:15978)	5
Hematological System Development and Function	adhesion	adhesion of immune cells	8.85E-06	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,MARCO,PTPRC,SELL	8
Immune Cell Trafficking	adhesion	adhesion of immune cells	8.85E-06	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,MARCO,PTPRC,SELL	8
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of immune cells	8.85E-06	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,MARCO,PTPRC,SELL	8

Tissue Development	adhesion	adhesion of immune cells	8,85E-06	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,MARCO,PTPRC,SELL	8
Cellular Movement	chemotaxis	chemotaxis of endothelial cell lines	9,11E-06	CXCL10,CXCL9,CXCR2	3
Cardiovascular System Development and Function	chemotaxis	chemotaxis of endothelial cell lines	9,11E-06	CXCL10,CXCL9,CXCR2	3
Lipid Metabolism	induction	induction of prostaglandin	9,11E-06	CAMP (includes EG:12796),IL6,PTGS2	3
Small Molecule Biochemistry	induction	induction of prostaglandin	9,11E-06	CAMP (includes EG:12796),IL6,PTGS2	3
Inflammatory Response	inflammation	inflammation of peritoneum	9,11E-06	CFTR,PTGS2,SELL	3
Hematological Disease	chronic B-cell leukemia	chronic B-cell leukemia	9,18E-06	CXCL9,IFNG (includes EG:15978),IL6,MS4A1,SELL	5
Immunological Disease	chronic B-cell leukemia	chronic B-cell leukemia	9,18E-06	CXCL9,IFNG (includes EG:15978),IL6,MS4A1,SELL	5
Cancer	chronic B-cell leukemia	chronic B-cell leukemia	9,18E-06	CXCL9,IFNG (includes EG:15978),IL6,MS4A1,SELL	5
Cellular Movement	migration	migration of neutrophils	9,18E-06	CAMP (includes EG:12796),CXCR2,IFNG (includes EG:15978),IL6,SELL	5
Hematological System Development and Function	migration	migration of neutrophils	9,18E-06	CAMP (includes EG:12796),CXCR2,IFNG (includes EG:15978),IL6,SELL	5
Immune Cell Trafficking	migration	migration of neutrophils	9,18E-06	CAMP (includes EG:12796),CXCR2,IFNG (includes EG:15978),IL6,SELL	5
Inflammatory Response	migration	migration of neutrophils	9,18E-06	CAMP (includes EG:12796),CXCR2,IFNG (includes EG:15978),IL6,SELL	5
Cellular Movement	migration	migration of phagocytes	1,03E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,SELL	7
Hematological System Development and Function	migration	migration of phagocytes	1,03E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,SELL	7
Immune Cell Trafficking	migration	migration of phagocytes	1,03E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,SELL	7
Inflammatory Response	migration	migration of phagocytes	1,03E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,SELL	7
Lipid Metabolism	metabolism	fatty acid metabolism	1,03E-05	ACSM3,APOB,CFTR,FABP2,HPGD,IFNG (includes EG:15978),IL6,MS4A1,PPARGC1A,PTGS2	10
Small Molecule Biochemistry	metabolism	fatty acid metabolism	1,03E-05	ACSM3,APOB,CFTR,FABP2,HPGD,IFNG (includes EG:15978),IL6,MS4A1,PPARGC1A,PTGS2	10
Cellular Movement	homing	homing of T lymphocytes	1,05E-05	CAMP (includes EG:12796),Ch3i3/Ch3i34,CXCL10,CXCL9,SELL	5
Hematological System Development and Function	homing	homing of T lymphocytes	1,05E-05	CAMP (includes EG:12796),Ch3i3/Ch3i34,CXCL10,CXCL9,SELL	5
Immune Cell Trafficking	homing	homing of T lymphocytes	1,05E-05	CAMP (includes EG:12796),Ch3i3/Ch3i34,CXCL10,CXCL9,SELL	5
Cell-mediated Immune Response	homing	homing of T lymphocytes	1,05E-05	CAMP (includes EG:12796),Ch3i3/Ch3i34,CXCL10,CXCL9,SELL	5
Cardiovascular Disease	abdominal aortic aneurysm	abdominal aortic aneurysm	1,10E-05	CXCL10,IFNG (includes EG:15978),PTGS2	3
Hematological Disease	follicular non-Hodgkin's disease	follicular non-Hodgkin's disease	1,10E-05	IFNG (includes EG:15978),IL6,MS4A1	3
Cancer	follicular non-Hodgkin's disease	follicular non-Hodgkin's disease	1,10E-05	IFNG (includes EG:15978),IL6,MS4A1	3
Inflammatory Response	immune response	immune response of phagocytes	1,12E-05	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),IL6,MARCO,PTPRC	6
Cell-To-Cell Signaling and Interaction	immune response	immune response of phagocytes	1,12E-05	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),IL6,MARCO,PTPRC	6
Lymphoid Tissue Structure and Development	morphology	morphology of spleen	1,20E-05	CXCR2,IFNG (includes EG:15978),MARCO,PTGS2,PTPRC,SELL,ZC3H12A	7
Organ Morphology	morphology	morphology of spleen	1,20E-05	CXCR2,IFNG (includes EG:15978),MARCO,PTGS2,PTPRC,SELL,ZC3H12A	7
Inflammatory Disease	dermatitis	Dermatitis	1,23E-05	CAMP (includes EG:12796),CXCL9,IFNG (includes EG:15978),LCE3D,PPARGC1A,PTGS2,SELL,TRPV3	8
Dermatological Diseases and Conditions	dermatitis	Dermatitis	1,23E-05	CAMP (includes EG:12796),CXCL9,IFNG (includes EG:15978),LCE3D,PPARGC1A,PTGS2,SELL,TRPV3	8
Cell-To-Cell Signaling and Interaction	response	response of myeloid cells	1,25E-05	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),IL6,MARCO,PTPRC	6
Hematological System Development and Function	activation	activation of granulocytes	1,30E-05	CXCL9,CXCR2,IFNG (includes EG:15978),IL6,SELL	5
Immune Cell Trafficking	activation	activation of granulocytes	1,30E-05	CXCL9,CXCR2,IFNG (includes EG:15978),IL6,SELL	5
Inflammatory Response	activation	activation of granulocytes	1,30E-05	CXCL9,CXCR2,IFNG (includes EG:15978),IL6,SELL	5
Cell-To-Cell Signaling and Interaction	activation	activation of granulocytes	1,30E-05	CXCL9,CXCR2,IFNG (includes EG:15978),IL6,SELL	5
Cellular Movement	attraction	attraction of dendritic cells	1,32E-05	CAMP (includes EG:12796),CXCL10,CXCL9	3
Immune Cell Trafficking	attraction	attraction of dendritic cells	1,32E-05	CAMP (includes EG:12796),CXCL10,CXCL9	3
Cell-To-Cell Signaling and Interaction	attraction	attraction of dendritic cells	1,32E-05	CAMP (includes EG:12796),CXCL10,CXCL9	3
Cardiovascular System Development and Function	differentiation	differentiation of vascular endothelial cells	1,32E-05	CXCL10,IFNG (includes EG:15978),PTGS2	3
Cellular Development	differentiation	differentiation of vascular endothelial cells	1,32E-05	CXCL10,IFNG (includes EG:15978),PTGS2	3
Cellular Movement	transmigration	transmigration of leukocytes	1,41E-05	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6	5
Hematological System Development and Function	transmigration	transmigration of leukocytes	1,41E-05	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6	5
Immune Cell Trafficking	transmigration	transmigration of leukocytes	1,41E-05	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6	5
Hematological System Development and Function	quantity	quantity of leukocytes	1,43E-05	CAMP (includes EG:12796),CXCL10,CXCR2,GPR83,IFNG (includes EG:15978),IL6,MMP8,MS4A1,PTGS2,PTPRC,SELL,ZC3H12A	12
Tissue Morphology	quantity	quantity of leukocytes	1,43E-05	CAMP (includes EG:12796),CXCL10,CXCR2,GPR83,IFNG (includes EG:15978),IL6,MMP8,MS4A1,PTGS2,PTPRC,SELL,ZC3H12A	12
Hematological System Development and Function	phagocytosis	phagocytosis of myeloid cells	1,47E-05	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),MARCO,PTPRC	5
Inflammatory Response	phagocytosis	phagocytosis of myeloid cells	1,47E-05	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),MARCO,PTPRC	5
Cell-To-Cell Signaling and Interaction	phagocytosis	phagocytosis of myeloid cells	1,47E-05	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),MARCO,PTPRC	5
Cellular Function and Maintenance	phagocytosis	phagocytosis of myeloid cells	1,47E-05	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),MARCO,PTPRC	5
Inflammatory Response	phagocytosis	phagocytosis of myeloid cells	1,47E-05	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),MARCO,PTPRC	5
Cell-To-Cell Signaling and Interaction	phagocytosis	phagocytosis of phagocytes	1,53E-05	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),MARCO,PTPRC	5
Cellular Function and Maintenance	phagocytosis	phagocytosis of phagocytes	1,53E-05	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),MARCO,PTPRC	5
Cellular Function and Maintenance	phagocytosis	phagocytosis of phagocytes	1,53E-05	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),MARCO,PTPRC	5
Cellular Function and Maintenance	internalization	internalization of cells	1,66E-05	CAMP (includes EG:12796),CFTR,IFNG (includes EG:15978),MARCO	4
Cell Death and Survival	cell death	cell death of lung cancer cell lines	1,75E-05	CAMP (includes EG:12796),FOXQ2,IFNG (includes EG:15978),IL6,PTGS2,SLC7A11	6
Inflammatory Response	immune response	immune response of macrophages	1,86E-05	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6,MARCO,PTPRC	5
Cell-To-Cell Signaling and Interaction	immune response	immune response of macrophages	1,86E-05	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6,MARCO,PTPRC	5
Cell Death and Survival	apoptosis	apoptosis of neutrophils	1,90E-05	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6,MMP8	4
Immunological Disease	Graves' ophthalmopathy	Graves' ophthalmopathy	2,00E-05	IL6,MS4A1	2
Endocrine System Disorders	Graves' ophthalmopathy	Graves' ophthalmopathy	2,00E-05	IL6,MS4A1	2
Hereditary Disorder	Graves' ophthalmopathy	Graves' ophthalmopathy	2,00E-05	IL6,MS4A1	2
Metabolic Disease	Graves' ophthalmopathy	Graves' ophthalmopathy	2,00E-05	IL6,MS4A1	2
Ophthalmic Disease	Graves' ophthalmopathy	Graves' ophthalmopathy	2,00E-05	IL6,MS4A1	2
Hematological System Development and Function	aggregation	aggregation of hematopoietic progenitor cells	2,00E-05	CXCL10,CXCL9	2
Tissue Development	aggregation	aggregation of hematopoietic progenitor cells	2,00E-05	CXCL10,CXCL9	2
Hematopoiesis	aggregation	aggregation of hematopoietic progenitor cells	2,00E-05	CXCL10,CXCL9	2
Cellular Movement	attraction	attraction of Th1 cells	2,00E-05	CXCL10,CXCL9	2
Hematological System Development and Function	attraction	attraction of Th1 cells	2,00E-05	CXCL10,CXCL9	2
Immune Cell Trafficking	attraction	attraction of Th1 cells	2,00E-05	CXCL10,CXCL9	2
Cell-To-Cell Signaling and Interaction	attraction	attraction of Th1 cells	2,00E-05	CXCL10,CXCL9	2
Cellular Movement	attraction	attraction of plasmacytoid dendritic cells	2,00E-05	CXCL10,CXCL9	2
Immune Cell Trafficking	attraction	attraction of plasmacytoid dendritic cells	2,00E-05	CXCL10,CXCL9	2
Cell-To-Cell Signaling and Interaction	attraction	attraction of plasmacytoid dendritic cells	2,00E-05	CXCL10,CXCL9	2
Cellular Function and Maintenance	autophagy	autophagy of monocytes	2,00E-05	CAMP (includes EG:12796),IFNG (includes EG:15978)	2
Cell Morphology	autophagy	autophagy of monocytes	2,00E-05	CAMP (includes EG:12796),IFNG (includes EG:15978)	2
Lipid Metabolism	conversion	conversion of eicosapentenoic acid	2,00E-05	CFTR,PTGS2	2
Small Molecule Biochemistry	conversion	conversion of eicosapentenoic acid	2,00E-05	CFTR,PTGS2	2
Hematological System Development and Function	polarization	polarization of hematopoietic progenitor cells	2,00E-05	CXCL10,CXCL9	2
Cell Morphology	polarization	polarization of hematopoietic progenitor cells	2,00E-05	CXCL10,CXCL9	2
Hematopoiesis	polarization	polarization of hematopoietic progenitor cells	2,00E-05	CXCL10,CXCL9	2
Cellular Movement	influx	influx of leukocytes	2,02E-05	CXCR2,IFNG (includes EG:15978),IL6,MARCO	4
Hematological System Development and Function	influx	influx of leukocytes	2,02E-05	CXCR2,IFNG (includes EG:15978),IL6,MARCO	4
Immune Cell Trafficking	influx	influx of leukocytes	2,02E-05	CXCR2,IFNG (includes EG:15978),IL6,MARCO	4
Immunological Disease	systemic autoimmune syndrome	systemic autoimmune syndrome	2,03E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,MMP8,MS4A1,PTGS2,PTPRC,SELL,SLC7A11	12
Respiratory Disease	damage	damage of lung	2,08E-05	CXCR2,IFNG (includes EG:15978),IL6,MARCO,PTGS2	5
Organismal Injury and Abnormalities	damage	damage of lung	2,08E-05	CXCR2,IFNG (includes EG:15978),IL6,MARCO,PTGS2	5
Cellular Movement	chemotaxis	chemotaxis of neuroglia	2,15E-05	CXCL10,CXCL9,IL6	3
Infectious Disease	quantity	quantity of virus	2,16E-05	CXCL9,IFNG (includes EG:15978),IL6,PTGS2	4

Cellular Function and Maintenance	function	function of phagocytes	2.38E-05	CXCL10,CXCR2,IFNG (includes EG:15978),IL6,MARCO,PTGS2,SELL	7
Hematological System Development and Function	activation	activation of leukocytes	2.39E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,FOXA2,IFNG (includes EG:15978),IL6,PTGS2,PTPRC,SELL	10
Immune Cell Trafficking	activation	activation of leukocytes	2.39E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,FOXA2,IFNG (includes EG:15978),IL6,PTGS2,PTPRC,SELL	10
Inflammatory Response	activation	activation of leukocytes	2.39E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,FOXA2,IFNG (includes EG:15978),IL6,PTGS2,PTPRC,SELL	10
Cell-To-Cell Signaling and Interaction	activation	activation of leukocytes	2.39E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,FOXA2,IFNG (includes EG:15978),IL6,PTGS2,PTPRC,SELL	10
Cell-To-Cell Signaling and Interaction	binding	binding of leukemia cell lines	2.44E-05	CXCR2,IFNG (includes EG:15978),IL6,SELL	4
Cellular Movement	chemotaxis	chemotaxis of embryonic cell lines	2.48E-05	CAMP (includes EG:12796),CXCL10,CXCR2	3
Embryonic Development	chemotaxis	chemotaxis of embryonic cell lines	2.48E-05	CAMP (includes EG:12796),CXCL10,CXCR2	3
Cellular Movement	chemotaxis	chemotaxis of epithelial cell lines	2.48E-05	CAMP (includes EG:12796),CXCL10,CXCR2	3
Hair and Skin Development and Function	chemotaxis	chemotaxis of epithelial cell lines	2.48E-05	CAMP (includes EG:12796),CXCL10,CXCR2	3
Cellular Movement	trafficking	trafficking of T lymphocytes	2.48E-05	CXCL10,IFNG (includes EG:15978),SELL	3
Hematological System Development and Function	trafficking	trafficking of T lymphocytes	2.48E-05	CXCL10,IFNG (includes EG:15978),SELL	3
Immune Cell Trafficking	trafficking	trafficking of T lymphocytes	2.48E-05	CXCL10,IFNG (includes EG:15978),SELL	3
Cell-mediated Immune Response	trafficking	trafficking of T lymphocytes	2.48E-05	CXCL10,IFNG (includes EG:15978),SELL	3
Cell-To-Cell Signaling and Interaction	binding	binding of cells	2.64E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,MARCO,PTPRC,SELL	9
Tissue Morphology	abnormal morphology	abnormal morphology of lymph node	2.78E-05	CXCR2,IFNG (includes EG:15978),PTGS2,SELL,ZC3H12A	5
Lymphoid Tissue Structure and Development	abnormal morphology	abnormal morphology of lymph node	2.78E-05	CXCR2,IFNG (includes EG:15978),PTGS2,SELL,ZC3H12A	5
Organ Morphology	abnormal morphology	abnormal morphology of lymph node	2.78E-05	CXCR2,IFNG (includes EG:15978),PTGS2,SELL,ZC3H12A	5
Cellular Movement	cell rolling	cell rolling of mononuclear leukocytes	2.85E-05	CXCR2,IFNG (includes EG:15978),SELL	3
Hematological System Development and Function	cell rolling	cell rolling of mononuclear leukocytes	2.85E-05	CXCR2,IFNG (includes EG:15978),SELL	3
Immune Cell Trafficking	cell rolling	cell rolling of mononuclear leukocytes	2.85E-05	CXCR2,IFNG (includes EG:15978),SELL	3
Cellular Movement	recruitment	recruitment of inflammatory leukocytes	2.85E-05	CXCL10,IFNG (includes EG:15978),IL6	3
Hematological System Development and Function	recruitment	recruitment of inflammatory leukocytes	2.85E-05	CXCL10,IFNG (includes EG:15978),IL6	3
Immune Cell Trafficking	recruitment	recruitment of inflammatory leukocytes	2.85E-05	CXCL10,IFNG (includes EG:15978),IL6	3
Cell-To-Cell Signaling and Interaction	recruitment	recruitment of inflammatory leukocytes	2.85E-05	CXCL10,IFNG (includes EG:15978),IL6	3
Molecular Transport	quantity	quantity of metal ion	2.92E-05	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,PTGS2,PTPRC,SCNN1G,SELL	9
Cellular Function and Maintenance	function	function of leukocytes	3.03E-05	CXCL10,CXCR2,IFNG (includes EG:15978),IL6,MARCO,MS4A1,PTGS2,PTPRC,SELL	9
Hematological Disease	lymphocytic leukemia	lymphocytic leukemia	3.20E-05	CXCL9,IFNG (includes EG:15978),IL6,MS4A1,PTPRC,SELL	6
Immunological Disease	lymphocytic leukemia	lymphocytic leukemia	3.20E-05	CXCL9,IFNG (includes EG:15978),IL6,MS4A1,PTPRC,SELL	6
Cancer	lymphocytic leukemia	lymphocytic leukemia	3.20E-05	CXCL9,IFNG (includes EG:15978),IL6,MS4A1,PTPRC,SELL	6
Cell-To-Cell Signaling and Interaction	activation	activation of cells	3.23E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,FOXA2,IFNG (includes EG:15978),IL6,MS4A1,PTGS2,PTPRC,SELL,TRPV3	12
Cell-To-Cell Signaling and Interaction	activation	activation of epithelial cells	3.25E-05	CAMP (includes EG:12796),IFNG (includes EG:15978),TRPV3	3
Organismal Injury and Abnormalities	formation	formation of lesion	3.27E-05	APOB,CFTL,CXCL10,IFNG (includes EG:15978),IL6,PTGS2	6
Hematological System Development and Function	adhesion	adhesion of phagocytes	3.42E-05	CXCR2,IFNG (includes EG:15978),IL6,MARCO,SELL	5
Immune Cell Trafficking	adhesion	adhesion of phagocytes	3.42E-05	CXCR2,IFNG (includes EG:15978),IL6,MARCO,SELL	5
Inflammatory Response	adhesion	adhesion of phagocytes	3.42E-05	CXCR2,IFNG (includes EG:15978),IL6,MARCO,SELL	5
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of phagocytes	3.42E-05	CXCR2,IFNG (includes EG:15978),IL6,MARCO,SELL	5
Tissue Development	adhesion	adhesion of phagocytes	3.42E-05	CXCR2,IFNG (includes EG:15978),IL6,MARCO,SELL	5
Hematological System Development and Function	binding	binding of myeloid cells	3.47E-05	CXCL10,CXCR2,IFNG (includes EG:15978),SELL	4
Cell-To-Cell Signaling and Interaction	binding	binding of myeloid cells	3.47E-05	CXCL10,CXCR2,IFNG (includes EG:15978),SELL	4
Hematological System Development and Function	maturation	maturation of T lymphocytes	3.47E-05	IFNG (includes EG:15978),IL6,PTGS2,PTPRC	4
Cellular Development	maturation	maturation of T lymphocytes	3.47E-05	IFNG (includes EG:15978),IL6,PTGS2,PTPRC	4
Hematopoiesis	maturation	maturation of T lymphocytes	3.47E-05	IFNG (includes EG:15978),IL6,PTGS2,PTPRC	4
Cellular Movement	cell movement	cell movement of antigen presenting cells	3.63E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),PTGS2,SELL	7
Hematological System Development and Function	cell movement	cell movement of antigen presenting cells	3.63E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),PTGS2,SELL	7
Immune Cell Trafficking	cell movement	cell movement of antigen presenting cells	3.63E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),PTGS2,SELL	7
Cardiovascular Disease	heart failure	heart failure	3.68E-05	ACE2 (includes EG:302668),HPGD,IFNG (includes EG:15978),IL6,PPARGC1A,PTGS2	6
Humoral Immune Response	quantity	quantity of IgG	3.76E-05	CXCL10,CXCL9,IFNG (includes EG:15978),IL6,PTGS2,ZC3H12A	6
Protein Synthesis	quantity	quantity of IgG	3.76E-05	CXCL10,CXCL9,IFNG (includes EG:15978),IL6,PTGS2,ZC3H12A	6
Hematological System Development and Function	quantity	quantity of lymphocytes	3.92E-05	CAMP (includes EG:12796),CXCL10,CXCR2,GPR83,IFNG (includes EG:15978),IL6,MS4A1,PTPRC,SELL,ZC3H12A	10
Tissue Morphology	quantity	quantity of lymphocytes	3.92E-05	CAMP (includes EG:12796),CXCL10,CXCR2,GPR83,IFNG (includes EG:15978),IL6,MS4A1,PTPRC,SELL,ZC3H12A	10
Respiratory Disease	growth	growth of lung carcinoma	4.00E-05	CXCR2,PTGS2	2
Cancer	growth	growth of lung carcinoma	4.00E-05	CXCR2,PTGS2	2
Cellular Movement	migration	migration of cytotoxic T cells	4.00E-05	CXCL10,CXCL9	2
Hematological System Development and Function	migration	migration of cytotoxic T cells	4.00E-05	CXCL10,CXCL9	2
Immune Cell Trafficking	migration	migration of cytotoxic T cells	4.00E-05	CXCL10,CXCL9	2
Cell-mediated Immune Response	migration	migration of cytotoxic T cells	4.00E-05	CXCL10,CXCL9	2
Energy Production	oxidation	oxidation of prostaglandin	4.00E-05	HPGD,PTGS2	2
Lipid Metabolism	oxidation	oxidation of prostaglandin	4.00E-05	HPGD,PTGS2	2
Small Molecule Biochemistry	oxidation	oxidation of prostaglandin	4.00E-05	HPGD,PTGS2	2
Cellular Movement	recruitment	recruitment of Th1 cells	4.00E-05	CXCL10,CXCL9	2
Hematological System Development and Function	recruitment	recruitment of Th1 cells	4.00E-05	CXCL10,CXCL9	2
Immune Cell Trafficking	recruitment	recruitment of Th1 cells	4.00E-05	CXCL10,CXCL9	2
Cell-To-Cell Signaling and Interaction	recruitment	recruitment of Th1 cells	4.00E-05	CXCL10,CXCL9	2
Cell-mediated Immune Response	recruitment	recruitment of Th1 cells	4.00E-05	CXCL10,CXCL9	2
Hematological System Development and Function	sensitization	sensitization of macrophages	4.00E-05	IFNG (includes EG:15978),IL6	2
Inflammatory Response	sensitization	sensitization of macrophages	4.00E-05	IFNG (includes EG:15978),IL6	2
Cell-To-Cell Signaling and Interaction	sensitization	sensitization of macrophages	4.00E-05	IFNG (includes EG:15978),IL6	2
Cell Morphology	whole-cell conductance	whole-cell conductance of oocytes	4.00E-05	CFTL,SCNN1G	2
Reproductive System Development and Function	whole-cell conductance	whole-cell conductance of oocytes	4.00E-05	CFTL,SCNN1G	2
Hematological System Development and Function	activation	activation of antigen presenting cells	4.03E-05	CAMP (includes EG:12796),CXCL10,FOXA2,IFNG (includes EG:15978),IL6,PTGS2	6
Immune Cell Trafficking	activation	activation of antigen presenting cells	4.03E-05	CAMP (includes EG:12796),CXCL10,FOXA2,IFNG (includes EG:15978),IL6,PTGS2	6
Inflammatory Response	activation	activation of antigen presenting cells	4.03E-05	CAMP (includes EG:12796),CXCL10,FOXA2,IFNG (includes EG:15978),IL6,PTGS2	6
Cell-To-Cell Signaling and Interaction	activation	activation of antigen presenting cells	4.03E-05	CAMP (includes EG:12796),CXCL10,FOXA2,IFNG (includes EG:15978),IL6,PTGS2	6
Lipid Metabolism	conversion	conversion of eicosanoid	4.16E-05	CFTL,HPGD,PTGS2	3
Small Molecule Biochemistry	conversion	conversion of eicosanoid	4.16E-05	CFTL,HPGD,PTGS2	3
Cellular Movement	recruitment	recruitment of lymphocytes	4.53E-05	CXCL10,CXCL9,IFNG (includes EG:15978),SELL	4
Hematological System Development and Function	recruitment	recruitment of lymphocytes	4.53E-05	CXCL10,CXCL9,IFNG (includes EG:15978),SELL	4
Immune Cell Trafficking	recruitment	recruitment of lymphocytes	4.53E-05	CXCL10,CXCL9,IFNG (includes EG:15978),SELL	4
Cell-To-Cell Signaling and Interaction	recruitment	recruitment of lymphocytes	4.53E-05	CXCL10,CXCL9,IFNG (includes EG:15978),SELL	4
Immunological Disease	immediate hypersensitivity	immediate hypersensitivity	4.53E-05	CAMP (includes EG:12796),CXCL9,IFNG (includes EG:15978),LCE3D,PPARGC1A,PTGS2,PTPRC	4
Hematological System Development and Function	quantity	quantity of B lymphocytes	4.63E-05	CAMP (includes EG:12796),CXCR2,IFNG (includes EG:15978),IL6,MS4A1,PTPRC,ZC3H12A	7
Humoral Immune Response	quantity	quantity of B lymphocytes	4.63E-05	CAMP (includes EG:12796),CXCR2,IFNG (includes EG:15978),IL6,MS4A1,PTPRC,ZC3H12A	7
Tissue Morphology	quantity	quantity of B lymphocytes	4.63E-05	CAMP (includes EG:12796),CXCR2,IFNG (includes EG:15978),IL6,MS4A1,PTPRC,ZC3H12A	7
Cellular Movement	chemoattraction	chemoattraction of myeloid cells	4.67E-05	CAMP (includes EG:12796),CXCL10,CXCL9	3
Hematological System Development and Function	chemoattraction	chemoattraction of myeloid cells	4.67E-05	CAMP (includes EG:12796),CXCL10,CXCL9	3
Immune Cell Trafficking	chemoattraction	chemoattraction of myeloid cells	4.67E-05	CAMP (includes EG:12796),CXCL10,CXCL9	3
Inflammatory Response	chemoattraction	chemoattraction of myeloid cells	4.67E-05	CAMP (includes EG:12796),CXCL10,CXCL9	3
Cell-To-Cell Signaling and Interaction	chemoattraction	chemoattraction of myeloid cells	4.67E-05	CAMP (includes EG:12796),CXCL10,CXCL9	3

Cellular Movement	chemotaxis	chemotaxis of antigen presenting cells	4,72E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,SELL	5
Hematological System Development and Function	chemotaxis	chemotaxis of antigen presenting cells	4,72E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,SELL	5
Immune Cell Trafficking	chemotaxis	chemotaxis of antigen presenting cells	4,72E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,SELL	5
Inflammatory Response	chemotaxis	chemotaxis of antigen presenting cells	4,72E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,SELL	5
Lipid Metabolism	synthesis	synthesis of fatty acid	4,87E-05	ACSM3,CFTR,HPGD,IFNG (includes EG:15978),IL6,PPARGC1A,PTGS2	7
Small Molecule Biochemistry	synthesis	synthesis of fatty acid	4,87E-05	ACSM3,CFTR,HPGD,IFNG (includes EG:15978),IL6,PPARGC1A,PTGS2	7
Hematological System Development and Function	accumulation	accumulation of leukocytes	4,93E-05	CXCL10,CXCL9,IFNG (includes EG:15978),IL6,MMP8,SELL	6
Immune Cell Trafficking	accumulation	accumulation of leukocytes	4,93E-05	CXCL10,CXCL9,IFNG (includes EG:15978),IL6,MMP8,SELL	6
Inflammatory Response	accumulation	accumulation of leukocytes	4,93E-05	CXCL10,CXCL9,IFNG (includes EG:15978),IL6,MMP8,SELL	6
Tissue Development	accumulation	accumulation of leukocytes	4,93E-05	CXCL10,CXCL9,IFNG (includes EG:15978),IL6,MMP8,SELL	6
Hematological System Development and Function	function	function of lymphocytes	5,21E-05	CXCL10,CXCR2,IFNG (includes EG:15978),IL6,MS4A1,PTPRC,SELL	7
Cellular Function and Maintenance	function	function of lymphocytes	5,21E-05	CXCL10,CXCR2,IFNG (includes EG:15978),IL6,MS4A1,PTPRC,SELL	7
Immunological Disease	autoimmune thyroid disease	autoimmune thyroid disease	5,22E-05	CXCL10,IL6,MS4A1	3
Endocrine System Disorders	autoimmune thyroid disease	autoimmune thyroid disease	5,22E-05	CXCL10,IL6,MS4A1	3
Cellular Movement	chemotaxis	chemotaxis of kidney cell lines	5,22E-05	CAMP (includes EG:12796),CXCL10,CXCR2	3
Renal and Urological System Development and Function	chemotaxis	chemotaxis of kidney cell lines	5,22E-05	CAMP (includes EG:12796),CXCL10,CXCR2	3
Cellular Movement	cell movement	cell movement of macrophages	5,26E-05	CAMP (includes EG:12796),CXCL10,CXCL9,IFNG (includes EG:15978),PTGS2,SELL	6
Hematological System Development and Function	cell movement	cell movement of macrophages	5,26E-05	CAMP (includes EG:12796),CXCL10,CXCL9,IFNG (includes EG:15978),PTGS2,SELL	6
Immune Cell Trafficking	cell movement	cell movement of macrophages	5,26E-05	CAMP (includes EG:12796),CXCL10,CXCL9,IFNG (includes EG:15978),PTGS2,SELL	6
Inflammatory Response	cell movement	cell movement of macrophages	5,26E-05	CAMP (includes EG:12796),CXCL10,CXCL9,IFNG (includes EG:15978),PTGS2,SELL	6
Inflammatory Response	phagocytosis	phagocytosis of cells	5,37E-05	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),IL6,MARCO,PTPRC	6
Cell-To-Cell Signaling and Interaction	phagocytosis	phagocytosis of cells	5,37E-05	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),IL6,MARCO,PTPRC	6
Cellular Function and Maintenance	phagocytosis	phagocytosis of cells	5,37E-05	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),IL6,MARCO,PTPRC	6
Cellular Function and Maintenance	flux	flux of ion	5,85E-05	CAMP (includes EG:12796),CFTR,CXCL10,IFNG (includes EG:15978),IL6,MS4A1,SCNN1G	7
Molecular Transport	flux	flux of ion	5,85E-05	CAMP (includes EG:12796),CFTR,CXCL10,IFNG (includes EG:15978),IL6,MS4A1,SCNN1G	7
Hematological System Development and Function	activation	activation of macrophages	6,20E-05	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),IL6,PTGS2	5
Immune Cell Trafficking	activation	activation of macrophages	6,20E-05	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),IL6,PTGS2	5
Inflammatory Response	activation	activation of macrophages	6,20E-05	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),IL6,PTGS2	5
Cell-To-Cell Signaling and Interaction	activation	activation of macrophages	6,20E-05	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),IL6,PTGS2	5
Lipid Metabolism	conversion	conversion of docosahexaenoic acid	6,65E-05	CFTR,PTGS2	2
Small Molecule Biochemistry	conversion	conversion of docosahexaenoic acid	6,65E-05	CFTR,PTGS2	2
Organismal Development	formation	formation of bile duct	6,65E-05	FOXA2,IL6	2
Infectious Disease	hantavirus pulmonary syndrome	hantavirus pulmonary syndrome	6,65E-05	IFNG (includes EG:15978),IL6	2
Respiratory Disease	hantavirus pulmonary syndrome	hantavirus pulmonary syndrome	6,65E-05	IFNG (includes EG:15978),IL6	2
Connective Tissue Disorders	hyperplasia	hyperplasia of synovial cells	6,65E-05	IFNG (includes EG:15978),IL6	2
Cancer	hyperplasia	hyperplasia of synovial cells	6,65E-05	IFNG (includes EG:15978),IL6	2
Cancer	growth	growth of tumor	6,98E-05	CXCL9,CXCR2,IFNG (includes EG:15978),IL6,MS4A1,PTGS2,SELL	7
Humoral Immune Response	class switching	class switching	7,04E-05	IFNG (includes EG:15978),IL6,PTGS2,ZC3H12A	4
Infectious Disease	sexually transmitted disease	sexually transmitted disease	7,04E-05	IFNG (includes EG:15978),IL6,PTGS2,PTPRC	4
Lymphoid Tissue Structure and Development	abnormal morphology	abnormal morphology of spleen	7,05E-05	CXCR2,IFNG (includes EG:15978),PTGS2,PTPRC,SELL,ZC3H12A	6
Organ Morphology	abnormal morphology	abnormal morphology of spleen	7,05E-05	CXCR2,IFNG (includes EG:15978),PTGS2,PTPRC,SELL,ZC3H12A	6
Hematological System Development and Function	proliferation	proliferation of myeloid progenitor cells	7,12E-05	CXCL10,IFNG (includes EG:15978),IL6	3
Lymphoid Tissue Structure and Development	proliferation	proliferation of myeloid progenitor cells	7,12E-05	CXCL10,IFNG (includes EG:15978),IL6	3
Cellular Development	proliferation	proliferation of myeloid progenitor cells	7,12E-05	CXCL10,IFNG (includes EG:15978),IL6	3
Hematopoiesis	proliferation	proliferation of myeloid progenitor cells	7,12E-05	CXCL10,IFNG (includes EG:15978),IL6	3
Cellular Growth and Proliferation	proliferation	proliferation of myeloid progenitor cells	7,12E-05	CXCL10,IFNG (includes EG:15978),IL6	3
Nutritional Disease	cachexia	cachexia	7,36E-05	CFTR,IFNG (includes EG:15978),IL6,PPARGC1A	4
Organismal Injury and Abnormalities	cachexia	cachexia	7,36E-05	CFTR,IFNG (includes EG:15978),IL6,PPARGC1A	4
Cellular Movement	cell movement	cell movement of epithelial cell lines	7,70E-05	CAMP (includes EG:12796),CXCL10,CXCR2,PTGS2	4
Hair and Skin Development and Function	cell movement	cell movement of epithelial cell lines	7,70E-05	CAMP (includes EG:12796),CXCL10,CXCR2,PTGS2	4
Cellular Movement	chemotaxis	chemotaxis of neutrophils	7,79E-05	CAMP (includes EG:12796),CXCL10,CXCR2,IFNG (includes EG:15978),SELL	5
Hematological System Development and Function	chemotaxis	chemotaxis of neutrophils	7,79E-05	CAMP (includes EG:12796),CXCL10,CXCR2,IFNG (includes EG:15978),SELL	5
Immune Cell Trafficking	chemotaxis	chemotaxis of neutrophils	7,79E-05	CAMP (includes EG:12796),CXCL10,CXCR2,IFNG (includes EG:15978),SELL	5
Inflammatory Response	chemotaxis	chemotaxis of neutrophils	7,79E-05	CAMP (includes EG:12796),CXCL10,CXCR2,IFNG (includes EG:15978),SELL	5
Cell Death and Survival	apoptosis	apoptosis of oligodendrocytes	7,84E-05	CXCR2,IFNG (includes EG:15978),PTGS2	3
Cellular Movement	cell movement	cell movement of colon cancer cell lines	8,06E-05	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),PTGS2	4
Cellular Movement	cell movement	cell movement of neuroglia	8,06E-05	CXCL10,CXCL9,CXCR2,IL6	4
Hematological System Development and Function	proliferation	proliferation of myeloid cells	8,06E-05	CXCL10,IFNG (includes EG:15978),IL6,PTPRC	4
Cellular Development	proliferation	proliferation of myeloid cells	8,06E-05	CXCL10,IFNG (includes EG:15978),IL6,PTPRC	4
Cellular Growth and Proliferation	proliferation	proliferation of myeloid cells	8,06E-05	CXCL10,IFNG (includes EG:15978),IL6,PTPRC	4
Cellular Movement	recruitment	recruitment of macrophages	8,06E-05	APOB,CXCL10,CXCR2,IFNG (includes EG:15978)	4
Hematological System Development and Function	recruitment	recruitment of macrophages	8,06E-05	APOB,CXCL10,CXCR2,IFNG (includes EG:15978)	4
Immune Cell Trafficking	recruitment	recruitment of macrophages	8,06E-05	APOB,CXCL10,CXCR2,IFNG (includes EG:15978)	4
Inflammatory Response	recruitment	recruitment of macrophages	8,06E-05	APOB,CXCL10,CXCR2,IFNG (includes EG:15978)	4
Cell-To-Cell Signaling and Interaction	recruitment	recruitment of macrophages	8,06E-05	APOB,CXCL10,CXCR2,IFNG (includes EG:15978)	4
Organismal Survival	organismal death	organismal death	8,20E-05	ACE2 (includes EG:302668),APOB,CAMP (includes EG:12796),CFTR,CXCL10,CXCL9,CXCR2,FOXA2,IFNG (includes EG:15978),IL6,MARCO,PPARGC1A,PTGS2,PTPRC,ZC3H12A	15
Hematological System Development and Function	accumulation	accumulation of eosinophils	8,61E-05	CXCL10,CXCL9,SELL	3
Immune Cell Trafficking	accumulation	accumulation of eosinophils	8,61E-05	CXCL10,CXCL9,SELL	3
Inflammatory Response	accumulation	accumulation of eosinophils	8,61E-05	CXCL10,CXCL9,SELL	3
Hypersensitivity Response	accumulation	accumulation of eosinophils	8,61E-05	CXCL10,CXCL9,SELL	3
Tissue Development	accumulation	accumulation of eosinophils	8,61E-05	CXCL10,CXCL9,SELL	3
Lipid Metabolism	synthesis	synthesis of steroid	9,12E-05	APOB,CFTR,CXCL10,IFNG (includes EG:15978),IL6,PPARGC1A	6
Small Molecule Biochemistry	synthesis	synthesis of steroid	9,12E-05	APOB,CFTR,CXCL10,IFNG (includes EG:15978),IL6,PPARGC1A	6
Vitamin and Mineral Metabolism	synthesis	synthesis of steroid	9,12E-05	APOB,CFTR,CXCL10,IFNG (includes EG:15978),IL6,PPARGC1A	6
Infectious Disease	infection	infection by DNA virus	9,18E-05	CXCL10,CXCL9,CXCR2,PTGS2	4
Hematological System Development and Function	phagocytosis	phagocytosis by macrophages	9,18E-05	CAMP (includes EG:12796),IFNG (includes EG:15978),MARCO,PTPRC	4
Inflammatory Response	phagocytosis	phagocytosis by macrophages	9,18E-05	CAMP (includes EG:12796),IFNG (includes EG:15978),MARCO,PTPRC	4
Cell-To-Cell Signaling and Interaction	phagocytosis	phagocytosis by macrophages	9,18E-05	CAMP (includes EG:12796),IFNG (includes EG:15978),MARCO,PTPRC	4
Cellular Function and Maintenance	phagocytosis	phagocytosis by macrophages	9,18E-05	CAMP (includes EG:12796),IFNG (includes EG:15978),MARCO,PTPRC	4
Molecular Transport	mobilization	mobilization of Ca2+	9,92E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),PTPRC,SELL	7
Vitamin and Mineral Metabolism	mobilization	mobilization of Ca2+	9,92E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),PTPRC,SELL	7
Cell Signaling	mobilization	mobilization of Ca2+	9,92E-05	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),PTPRC,SELL	7
Cell-To-Cell Signaling and Interaction	activation	activation of keratinocytes	9,96E-05	IFNG (includes EG:15978),TRPV3	2
Hair and Skin Development and Function	activation	activation of keratinocytes	9,96E-05	IFNG (includes EG:15978),TRPV3	2
Tissue Development	involution	delay in involution of mammary gland	9,96E-05	IL6,PTGS2	2
Organ Morphology	involution	delay in involution of mammary gland	9,96E-05	IL6,PTGS2	2
Reproductive System Development and Function	involution	delay in involution of mammary gland	9,96E-05	IL6,PTGS2	2
Connective Tissue Disorders	experimentally-induced arthritis	experimentally-induced arthritis of ankle joint	9,96E-05	IFNG (includes EG:15978),IL6	2
Inflammatory Disease	experimentally-induced arthritis	experimentally-induced arthritis of ankle joint	9,96E-05	IFNG (includes EG:15978),IL6	2

Skeletal and Muscular Disorders	experimentally-induced arthritis	experimentally-induced arthritis of ankle joint	9,96E-05	IFNG (includes EG:15978),IL6	2
Hematological System Development and Function	inhibition	inhibition of Th17 cells	9,96E-05	IFNG (includes EG:15978),PTGS2	2
Cellular Growth and Proliferation	inhibition	inhibition of Th17 cells	9,96E-05	IFNG (includes EG:15978),PTGS2	2
Hematological System Development and Function	activation	activation of neutrophils	9,99E-05	CXCR2,IFNG (includes EG:15978),IL6,SELL	4
Immune Cell Trafficking	activation	activation of neutrophils	9,99E-05	CXCR2,IFNG (includes EG:15978),IL6,SELL	4
Inflammatory Response	activation	activation of neutrophils	9,99E-05	CXCR2,IFNG (includes EG:15978),IL6,SELL	4
Cell-To-Cell Signaling and Interaction	activation	activation of neutrophils	9,99E-05	CXCR2,IFNG (includes EG:15978),IL6,SELL	4
Cancer	growth	growth of malignant tumor	9,99E-05	CXCL9,CXCR2,IL6,PTGS2	4
Hematological System Development and Function	function	function of T lymphocytes	1,02E-04	CXCL10,CXCR2,IFNG (includes EG:15978),IL6,PTPRC,SELL	6
Cellular Function and Maintenance	function	function of T lymphocytes	1,02E-04	CXCL10,CXCR2,IFNG (includes EG:15978),IL6,PTPRC,SELL	6
Cell Death and Survival	apoptosis	apoptosis of lung cell lines	1,03E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),PTGS2	3
Cellular Movement	chemoattraction	chemoattraction of phagocytes	1,03E-04	CAMP (includes EG:12796),CXCL10,CXCL9	3
Hematological System Development and Function	chemoattraction	chemoattraction of phagocytes	1,03E-04	CAMP (includes EG:12796),CXCL10,CXCL9	3
Immune Cell Trafficking	chemoattraction	chemoattraction of phagocytes	1,03E-04	CAMP (includes EG:12796),CXCL10,CXCL9	3
Inflammatory Response	chemoattraction	chemoattraction of phagocytes	1,03E-04	CAMP (includes EG:12796),CXCL10,CXCL9	3
Cell-To-Cell Signaling and Interaction	chemoattraction	chemoattraction of phagocytes	1,03E-04	CAMP (includes EG:12796),CXCL10,CXCL9	3
Connective Tissue Development and Function	formation	formation of osteoclasts	1,04E-04	ChI3/3/ChI34,IFNG (includes EG:15978),IL6,PTGS2	4
Cellular Growth and Proliferation	formation	formation of osteoclasts	1,04E-04	ChI3/3/ChI34,IFNG (includes EG:15978),IL6,PTGS2	4
Skeletal and Muscular System Development and Function	formation	formation of osteoclasts	1,04E-04	ChI3/3/ChI34,IFNG (includes EG:15978),IL6,PTGS2	4
Cancer	incidence	incidence of tumor	1,06E-04	IFNG (includes EG:15978),IL6,MMP8,PPARGC1A,PTGS2,SELL	6
Lipid Metabolism	metabolism	steroid metabolism	1,06E-04	Akr1c14,APOB,CFTR,CYP2C19,IFNG (includes EG:15978),IL6	6
Small Molecule Biochemistry	metabolism	steroid metabolism	1,06E-04	Akr1c14,APOB,CFTR,CYP2C19,IFNG (includes EG:15978),IL6	6
Vitamin and Mineral Metabolism	metabolism	steroid metabolism	1,06E-04	Akr1c14,APOB,CFTR,CYP2C19,IFNG (includes EG:15978),IL6	6
Inflammatory Disease	hepatitis	Hepatitis	1,07E-04	APOB,CXCL10,IFNG (includes EG:15978),IL6,PTPRC	5
Gastrointestinal Disease	hepatitis	Hepatitis	1,07E-04	APOB,CXCL10,IFNG (includes EG:15978),IL6,PTPRC	5
Hepatic System Disease	hepatitis	Hepatitis	1,07E-04	APOB,CXCL10,IFNG (includes EG:15978),IL6,PTPRC	5
Cellular Movement	chemotaxis	chemotaxis of T lymphocytes	1,09E-04	CAMP (includes EG:12796),ChI3/3/ChI34,CXCL10,CXCL9	4
Hematological System Development and Function	chemotaxis	chemotaxis of T lymphocytes	1,09E-04	CAMP (includes EG:12796),ChI3/3/ChI34,CXCL10,CXCL9	4
Immune Cell Trafficking	chemotaxis	chemotaxis of T lymphocytes	1,09E-04	CAMP (includes EG:12796),ChI3/3/ChI34,CXCL10,CXCL9	4
Inflammatory Response	chemotaxis	chemotaxis of T lymphocytes	1,09E-04	CAMP (includes EG:12796),ChI3/3/ChI34,CXCL10,CXCL9	4
Cell-mediated Immune Response	chemotaxis	chemotaxis of T lymphocytes	1,09E-04	CAMP (includes EG:12796),ChI3/3/ChI34,CXCL10,CXCL9	4
Infectious Disease	endotoxemia	endotoxemia	1,09E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6,PTGS2	4
Hematological Disease	endotoxemia	endotoxemia	1,09E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6,PTGS2	4
Inflammatory Response	immune response	immune response of T lymphocytes	1,09E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6,PTPRC	4
Cell-To-Cell Signaling and Interaction	immune response	immune response of T lymphocytes	1,09E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6,PTPRC	4
Molecular Transport	quantity	quantity of Ca2+	1,09E-04	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,PTGS2,PTPRC,SELL	8
Vitamin and Mineral Metabolism	quantity	quantity of Ca2+	1,09E-04	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,PTGS2,PTPRC,SELL	8
Cell Signaling	quantity	quantity of Ca2+	1,09E-04	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,PTGS2,PTPRC,SELL	8
Respiratory Disease	fibrosis	fibrosis of lung	1,10E-04	CFTR,IFNG (includes EG:15978),IL6,PTGS2,SELL	5
Inflammatory Disease	fibrosis	fibrosis of lung	1,10E-04	CFTR,IFNG (includes EG:15978),IL6,PTGS2,SELL	5
Organismal Injury and Abnormalities	fibrosis	fibrosis of lung	1,10E-04	CFTR,IFNG (includes EG:15978),IL6,PTGS2,SELL	5
Protein Synthesis	quantity	quantity of protein in blood	1,16E-04	APOB,CXCR2,FABP2,IFNG (includes EG:15978),IL6,PPARGC1A,PTGS2,SELL	8
Hematological System Development and Function	binding	binding of lymphocytes	1,22E-04	CXCL10,CXCL9,IFNG (includes EG:15978),SELL	4
Cell-To-Cell Signaling and Interaction	binding	binding of lymphocytes	1,22E-04	CXCL10,CXCL9,IFNG (includes EG:15978),SELL	4
Cellular Movement	chemotaxis	chemotaxis of macrophages	1,22E-04	CAMP (includes EG:12796),CXCL10,CXCL9,SELL	4
Hematological System Development and Function	chemotaxis	chemotaxis of macrophages	1,22E-04	CAMP (includes EG:12796),CXCL10,CXCL9,SELL	4
Immune Cell Trafficking	chemotaxis	chemotaxis of macrophages	1,22E-04	CAMP (includes EG:12796),CXCL10,CXCL9,SELL	4
Inflammatory Response	chemotaxis	chemotaxis of macrophages	1,22E-04	CAMP (includes EG:12796),CXCL10,CXCL9,SELL	4
Tissue Development	development	lung development	1,23E-04	CFTR,FOXA2,IFNG (includes EG:15978),IL6,PPARGC1A,SELL	6
Embryonic Development	development	lung development	1,23E-04	CFTR,FOXA2,IFNG (includes EG:15978),IL6,PPARGC1A,SELL	6
Organismal Development	development	lung development	1,23E-04	CFTR,FOXA2,IFNG (includes EG:15978),IL6,PPARGC1A,SELL	6
Organ Development	development	lung development	1,23E-04	CFTR,FOXA2,IFNG (includes EG:15978),IL6,PPARGC1A,SELL	6
Respiratory System Development and Function	development	lung development	1,23E-04	CFTR,FOXA2,IFNG (includes EG:15978),IL6,PPARGC1A,SELL	6
Hematological System Development and Function	accumulation	accumulation of lymphocytes	1,27E-04	CXCL10,IFNG (includes EG:15978),IL6,SELL	4
Immune Cell Trafficking	accumulation	accumulation of lymphocytes	1,27E-04	CXCL10,IFNG (includes EG:15978),IL6,SELL	4
Inflammatory Response	accumulation	accumulation of lymphocytes	1,27E-04	CXCL10,IFNG (includes EG:15978),IL6,SELL	4
Tissue Development	accumulation	accumulation of lymphocytes	1,27E-04	CXCL10,IFNG (includes EG:15978),IL6,SELL	4
Inflammatory Response	immune response	immune response of tumor cell lines	1,27E-04	IFNG (includes EG:15978),IL6,MARCO,MS4A1	4
Cell-To-Cell Signaling and Interaction	immune response	immune response of tumor cell lines	1,27E-04	IFNG (includes EG:15978),IL6,MARCO,MS4A1	4
Cell Morphology	polarization	polarization of blood cells	1,27E-04	CXCL10,CXCL9,IFNG (includes EG:15978),IL6	4
Organismal Injury and Abnormalities	damage	damage of liver	1,28E-04	CXCL10,CXCR2,IFNG (includes EG:15978),IL6,PTGS2	5
Gastrointestinal Disease	damage	damage of liver	1,28E-04	CXCL10,CXCR2,IFNG (includes EG:15978),IL6,PTGS2	5
Hepatic System Disease	damage	damage of liver	1,28E-04	CXCL10,CXCR2,IFNG (includes EG:15978),IL6,PTGS2	5
Nutritional Disease	obesity	obesity	1,29E-04	APOB,CXCL10,FABP2,FOXA2,IL6,PPARGC1A,PTGS2	7
Free Radical Scavenging	production	production of reactive oxygen species	1,29E-04	CAMP (includes EG:12796),CXCL9,IFNG (includes EG:15978),IL6,MS4A1,PPARGC1A,PTGS2	8
Hematological System Development and Function	quantity	quantity of T lymphocytes	1,29E-04	CAMP (includes EG:12796),CXCL10,GPR83,IFNG (includes EG:15978),IL6,PTPRC,SELL,ZC3H12A	8
Tissue Morphology	quantity	quantity of T lymphocytes	1,29E-04	CAMP (includes EG:12796),CXCL10,GPR83,IFNG (includes EG:15978),IL6,PTPRC,SELL,ZC3H12A	8
Tissue Morphology	quantity	quantity of cells	1,30E-04	APOB,CAMP (includes EG:12796),CFTR,CXCL10,CXCR2,GPR83,IFNG (includes EG:15978),IL6,MMP8,MS4A1,PPARGC1A,PTGS2,PTPRC,SELL,ZC3H12A	15
Free Radical Scavenging	synthesis	synthesis of reactive oxygen species	1,30E-04	CAMP (includes EG:12796),CXCL9,IFNG (includes EG:15978),IL6,MS4A1,PPARGC1A,PTGS2,ZC3H12A	8
Hematological System Development and Function	quantity	quantity of helper T lymphocytes	1,32E-04	CXCL10,GPR83,IL6,PTPRC,SELL	5
Tissue Morphology	quantity	quantity of helper T lymphocytes	1,32E-04	CXCL10,GPR83,IL6,PTPRC,SELL	5
Cellular Compromise	depletion	depletion of lymphocytes	1,32E-04	IFNG (includes EG:15978),MS4A1,SELL	3
Cell Death and Survival	cell death	cell death of carcinoma cell lines	1,35E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6,PTGS2,SLC7A11	5
Hematological System Development and Function	accumulation	accumulation of TREG cells	1,39E-04	IFNG (includes EG:15978),IL6	2
Immune Cell Trafficking	accumulation	accumulation of TREG cells	1,39E-04	IFNG (includes EG:15978),IL6	2
Inflammatory Response	accumulation	accumulation of TREG cells	1,39E-04	IFNG (includes EG:15978),IL6	2
Tissue Development	accumulation	accumulation of TREG cells	1,39E-04	IFNG (includes EG:15978),IL6	2
Endocrine System Development and Function	activation	activation of hypothalamus-pituitary-adrenal axis	1,39E-04	IFNG (includes EG:15978),IL6	2
Hematological System Development and Function	activation	activation of monocyte-derived macrophages	1,39E-04	CAMP (includes EG:12796),IFNG (includes EG:15978)	2
Immune Cell Trafficking	activation	activation of monocyte-derived macrophages	1,39E-04	CAMP (includes EG:12796),IFNG (includes EG:15978)	2
Inflammatory Response	activation	activation of monocyte-derived macrophages	1,39E-04	CAMP (includes EG:12796),IFNG (includes EG:15978)	2
Cell-To-Cell Signaling and Interaction	activation	activation of monocyte-derived macrophages	1,39E-04	CAMP (includes EG:12796),IFNG (includes EG:15978)	2
Cellular Movement	attraction	attraction of natural killer cells	1,39E-04	CXCL10,CXCL9	2
Immune Cell Trafficking	attraction	attraction of natural killer cells	1,39E-04	CXCL10,CXCL9	2
Cell-To-Cell Signaling and Interaction	attraction	attraction of natural killer cells	1,39E-04	CXCL10,CXCL9	2
Small Molecule Biochemistry	incorporation	incorporation of guanosine 5'-O-(3-thiotriphosphate)	1,39E-04	CXCL10,CXCL9	2
Cell Signaling	incorporation	incorporation of guanosine 5'-O-(3-thiotriphosphate)	1,39E-04	CXCL10,CXCL9	2
Nucleic Acid Metabolism	incorporation	incorporation of guanosine 5'-O-(3-thiotriphosphate)	1,39E-04	CXCL10,CXCL9	2
Cell-To-Cell Signaling and Interaction	stimulation	stimulation of hepatoma cell lines	1,39E-04	IFNG (includes EG:15978),IL6	2

Cellular Growth and Proliferation	stimulation	stimulation of hepatoma cell lines	1.39E-04	IFNG (includes EG:15978),IL6	2
Cardiovascular System Development and Function	vascularization	vascularization of hindlimb	1.39E-04	CAMP (includes EG:12796),PTGS2	2
Organismal Development	vascularization	vascularization of hindlimb	1.39E-04	CAMP (includes EG:12796),PTGS2	2
Lipid Metabolism	phospholipid flip-flop	phospholipid flip-flop of phosphatidylserine	1.43E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),PTGS2	3
Small Molecule Biochemistry	phospholipid flip-flop	phospholipid flip-flop of phosphatidylserine	1.43E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),PTGS2	3
Hematological System Development and Function	adhesion	adhesion of granulocytes	1.43E-04	CXCR2,IFNG (includes EG:15978),IL6,SELL	4
Immune Cell Trafficking	adhesion	adhesion of granulocytes	1.43E-04	CXCR2,IFNG (includes EG:15978),IL6,SELL	4
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of granulocytes	1.43E-04	CXCR2,IFNG (includes EG:15978),IL6,SELL	4
Tissue Development	adhesion	adhesion of granulocytes	1.43E-04	CXCR2,IFNG (includes EG:15978),IL6,SELL	4
Lipid Metabolism	quantity	quantity of sphingolipid	1.43E-04	ACER1,CFTR,IFNG (includes EG:15978),IL6	4
Small Molecule Biochemistry	quantity	quantity of sphingolipid	1.43E-04	ACER1,CFTR,IFNG (includes EG:15978),IL6	4
Molecular Transport	quantity	quantity of sphingolipid	1.43E-04	ACER1,CFTR,IFNG (includes EG:15978),IL6	4
Hematological System Development and Function	activation	activation of dendritic cells	1.48E-04	CAMP (includes EG:12796),FOXA2,IFNG (includes EG:15978),IL6	4
Immune Cell Trafficking	activation	activation of dendritic cells	1.48E-04	CAMP (includes EG:12796),FOXA2,IFNG (includes EG:15978),IL6	4
Inflammatory Response	activation	activation of dendritic cells	1.48E-04	CAMP (includes EG:12796),FOXA2,IFNG (includes EG:15978),IL6	4
Cell-To-Cell Signaling and Interaction	activation	activation of dendritic cells	1.48E-04	CAMP (includes EG:12796),FOXA2,IFNG (includes EG:15978),IL6	4
Inflammatory Response	fever	fever	1.66E-04	IFNG (includes EG:15978),IL6,PTGS2	3
Organismal Functions	fever	fever	1.66E-04	IFNG (includes EG:15978),IL6,PTGS2	3
Infectious Disease	mycosis	mycosis	1.66E-04	CXCR2,IFNG (includes EG:15978),IL6	3
Cardiovascular Disease	congestive heart failure	congestive heart failure	1.66E-04	ACE2 (includes EG:302668),HPGD,IL6,PPARGC1A	4
Neurological Disease	demyelination	demyelination	1.66E-04	CXCL10,IFNG (includes EG:15978),IL6,PTGS2	4
Cell-To-Cell Signaling and Interaction	activation	activation of astrocytes	1.78E-04	IFNG (includes EG:15978),IL6,PTGS2	3
Nervous System Development and Function	activation	activation of astrocytes	1.78E-04	IFNG (includes EG:15978),IL6,PTGS2	3
Cellular Movement	cell movement	cell movement of bone marrow cells	1.78E-04	ChI3/ChI34,IFNG (includes EG:15978),IL6	3
Immune Cell Trafficking	cell movement	cell movement of bone marrow cells	1.78E-04	ChI3/ChI34,IFNG (includes EG:15978),IL6	3
Inflammatory Response	cell movement	cell movement of bone marrow cells	1.78E-04	ChI3/ChI34,IFNG (includes EG:15978),IL6	3
Hematopoiesis	cell movement	cell movement of bone marrow cells	1.78E-04	ChI3/ChI34,IFNG (includes EG:15978),IL6	3
Lipid Metabolism	incorporation	incorporation of lipid	1.78E-04	ACER1,CFTR,FABP2	3
Small Molecule Biochemistry	incorporation	incorporation of lipid	1.78E-04	ACER1,CFTR,FABP2	3
Hematological System Development and Function	phagocytosis	phagocytosis of neutrophils	1.78E-04	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978)	3
Inflammatory Response	phagocytosis	phagocytosis of neutrophils	1.78E-04	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978)	3
Cell-To-Cell Signaling and Interaction	phagocytosis	phagocytosis of neutrophils	1.78E-04	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978)	3
Cellular Function and Maintenance	phagocytosis	phagocytosis of neutrophils	1.78E-04	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978)	3
Lipid Metabolism	concentration	concentration of phospholipid	1.79E-04	CFTR,FOXA2,IFNG (includes EG:15978),IL6,PTGS2	5
Small Molecule Biochemistry	concentration	concentration of phospholipid	1.79E-04	CFTR,FOXA2,IFNG (includes EG:15978),IL6,PTGS2	5
Molecular Transport	concentration	concentration of phospholipid	1.79E-04	CFTR,FOXA2,IFNG (includes EG:15978),IL6,PTGS2	5
Cardiovascular System Development and Function	development	development of cardiovascular system	1.81E-04	ACE2 (includes EG:302668),APOB,CAMP (includes EG:12796),CXCL10,CXCR2,FOXA2,IFNG (includes EG:15978),IL6,PPARGC1A,PTGS2,SELL	11
Cellular Movement	attraction	attraction of memory T lymphocytes	1.85E-04	CXCL10,CXCL9	2
Hematological System Development and Function	attraction	attraction of memory T lymphocytes	1.85E-04	CXCL10,CXCL9	2
Immune Cell Trafficking	attraction	attraction of memory T lymphocytes	1.85E-04	CXCL10,CXCL9	2
Cell-To-Cell Signaling and Interaction	attraction	attraction of memory T lymphocytes	1.85E-04	CXCL10,CXCL9	2
Cell Death and Survival	cell death	cell death of dermal fibroblasts	1.85E-04	CAMP (includes EG:12796),IFNG (includes EG:15978)	2
Cell Death and Survival	cell viability	cell viability of peripheral blood leukocytes	1.85E-04	APOB,IL6	2
Lipid Metabolism	concentration	concentration of palmitic acid	1.85E-04	PPARGC1A,PTGS2	2
Small Molecule Biochemistry	concentration	concentration of palmitic acid	1.85E-04	PPARGC1A,PTGS2	2
Molecular Transport	concentration	concentration of palmitic acid	1.85E-04	PPARGC1A,PTGS2	2
Cellular Growth and Proliferation	cystostasis	cystostasis of melanoma cell lines	1.85E-04	IFNG (includes EG:15978),IL6	2
Tissue Development	fibrogenesis	fibrogenesis of liver	1.85E-04	IFNG (includes EG:15978),IL6	2
Embryonic Development	fibrogenesis	fibrogenesis of liver	1.85E-04	IFNG (includes EG:15978),IL6	2
Organismal Development	fibrogenesis	fibrogenesis of liver	1.85E-04	IFNG (includes EG:15978),IL6	2
Organ Development	fibrogenesis	fibrogenesis of liver	1.85E-04	IFNG (includes EG:15978),IL6	2
Cellular Assembly and Organization	fibrogenesis	fibrogenesis of liver	1.85E-04	IFNG (includes EG:15978),IL6	2
Digestive System Development and Function	fibrogenesis	fibrogenesis of liver	1.85E-04	IFNG (includes EG:15978),IL6	2
Hepatic System Development and Function	fibrogenesis	fibrogenesis of liver	1.85E-04	IFNG (includes EG:15978),IL6	2
Cellular Movement	invasion	invasion of macrophages	1.85E-04	CXCL10,IFNG (includes EG:15978)	2
Immune Cell Trafficking	invasion	invasion of macrophages	1.85E-04	CXCL10,IFNG (includes EG:15978)	2
Inflammatory Response	invasion	invasion of macrophages	1.85E-04	CXCL10,IFNG (includes EG:15978)	2
Cellular Movement	localization	localization of T lymphocytes	1.85E-04	IFNG (includes EG:15978),IL6	2
Hematological System Development and Function	localization	localization of T lymphocytes	1.85E-04	IFNG (includes EG:15978),IL6	2
Immune Cell Trafficking	localization	localization of T lymphocytes	1.85E-04	IFNG (includes EG:15978),IL6	2
Inflammatory Response	localization	localization of T lymphocytes	1.85E-04	IFNG (includes EG:15978),IL6	2
Cellular Function and Maintenance	localization	localization of T lymphocytes	1.85E-04	IFNG (includes EG:15978),IL6	2
Cell-To-Cell Signaling and Interaction	permeability	permeability of tight junctions	1.85E-04	IFNG (includes EG:15978),IL6	2
Cell Morphology	permeability	permeability of tight junctions	1.85E-04	IFNG (includes EG:15978),IL6	2
Cellular Assembly and Organization	permeability	permeability of tight junctions	1.85E-04	IFNG (includes EG:15978),IL6	2
Hematological System Development and Function	stimulation	stimulation of monocytes	1.85E-04	IFNG (includes EG:15978),IL6	2
Inflammatory Response	stimulation	stimulation of monocytes	1.85E-04	IFNG (includes EG:15978),IL6	2
Cell-To-Cell Signaling and Interaction	stimulation	stimulation of monocytes	1.85E-04	IFNG (includes EG:15978),IL6	2
Cellular Growth and Proliferation	stimulation	stimulation of monocytes	1.85E-04	IFNG (includes EG:15978),IL6	2
Cell-To-Cell Signaling and Interaction	stimulation	stimulation of smooth muscle cells	1.85E-04	IFNG (includes EG:15978),IL6	2
Cellular Growth and Proliferation	stimulation	stimulation of smooth muscle cells	1.85E-04	IFNG (includes EG:15978),IL6	2
Skeletal and Muscular System Development and Function	stimulation	stimulation of smooth muscle cells	1.85E-04	IFNG (includes EG:15978),IL6	2
Cellular Movement	chemotaxis	chemotaxis of phagocytes	1.90E-04	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),SELL	6
Hematological System Development and Function	chemotaxis	chemotaxis of phagocytes	1.90E-04	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),SELL	6
Immune Cell Trafficking	chemotaxis	chemotaxis of phagocytes	1.90E-04	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),SELL	6
Inflammatory Response	chemotaxis	chemotaxis of phagocytes	1.90E-04	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),SELL	6
Lipid Metabolism	concentration	concentration of prostaglandin E2	1.91E-04	HPGD,IFNG (includes EG:15978),PTGS2	3
Small Molecule Biochemistry	concentration	concentration of prostaglandin E2	1.91E-04	HPGD,IFNG (includes EG:15978),PTGS2	3
Molecular Transport	concentration	concentration of prostaglandin E2	1.91E-04	HPGD,IFNG (includes EG:15978),PTGS2	3
Drug Metabolism	concentration	concentration of prostaglandin E2	1.91E-04	HPGD,IFNG (includes EG:15978),PTGS2	3
Hematological Disease	neutrophilia	neutrophilia	1.91E-04	IFNG (includes EG:15978),IL6,SELL	3
Organismal Injury and Abnormalities	neutrophilia	neutrophilia	1.91E-04	IFNG (includes EG:15978),IL6,SELL	3
Immunological Disease	neutrophilia	neutrophilia	1.91E-04	IFNG (includes EG:15978),IL6,SELL	3
Respiratory Disease	injury	injury of lung	1.91E-04	CXCR2,IL6,MARCO,PTGS2	4
Organismal Injury and Abnormalities	injury	injury of lung	1.91E-04	CXCR2,IL6,MARCO,PTGS2	4
Hematological Disease	non-Hodgkin's disease	non-Hodgkin's disease	1.96E-04	CXCL10,CXCL9,IFNG (includes EG:15978),IL6,MS4A1,SELL	6
Cancer	non-Hodgkin's disease	non-Hodgkin's disease	1.96E-04	CXCL10,CXCL9,IFNG (includes EG:15978),IL6,MS4A1,SELL	6
Lipid Metabolism	concentration	concentration of fatty acid	2.00E-04	APOB,CFTR,HPGD,IFNG (includes EG:15978),PPARGC1A,PTGS2	3
Small Molecule Biochemistry	concentration	concentration of fatty acid	2.00E-04	APOB,CFTR,HPGD,IFNG (includes EG:15978),PPARGC1A,PTGS2	6

Molecular Transport	concentration	concentration of fatty acid	2,00E-04	APOB,CFTR,HPGD,IFNG (includes EG:15978),PPARGC1A,PTGS2	6
Hematological System Development and Function	binding	binding of neutrophils	2,19E-04	CXCL10,CXCR2,SELL	3
Immune Cell Trafficking	binding	binding of neutrophils	2,19E-04	CXCL10,CXCR2,SELL	3
Inflammatory Response	binding	binding of neutrophils	2,19E-04	CXCL10,CXCR2,SELL	3
Cell-To-Cell Signaling and Interaction	binding	binding of neutrophils	2,19E-04	CXCL10,CXCR2,SELL	3
Tissue Development	binding	binding of neutrophils	2,19E-04	CXCL10,CXCR2,SELL	3
Hematological System Development and Function	function	function of Th1 cells	2,19E-04	CXCR2,IFNG (includes EG:15978),IL6	3
Cellular Function and Maintenance	function	function of Th1 cells	2,19E-04	CXCR2,IFNG (includes EG:15978),IL6	3
Cellular Movement	influx	influx of neutrophils	2,19E-04	CXCR2,IL6,MARCO	3
Hematological System Development and Function	influx	influx of neutrophils	2,19E-04	CXCR2,IL6,MARCO	3
Immune Cell Trafficking	influx	influx of neutrophils	2,19E-04	CXCR2,IL6,MARCO	3
Inflammatory Response	influx	influx of neutrophils	2,19E-04	CXCR2,IL6,MARCO	3
Organismal Injury and Abnormalities	injury	injury of mice	2,19E-04	IFNG (includes EG:15978),IL6,PTGS2	3
Connective Tissue Development and Function	proliferation	proliferation of hepatic stellate cells	2,19E-04	IFNG (includes EG:15978),IL6,PTGS2	3
Cellular Development	proliferation	proliferation of hepatic stellate cells	2,19E-04	IFNG (includes EG:15978),IL6,PTGS2	3
Cellular Growth and Proliferation	proliferation	proliferation of hepatic stellate cells	2,19E-04	IFNG (includes EG:15978),IL6,PTGS2	3
Hepatic System Development and Function	proliferation	proliferation of hepatic stellate cells	2,19E-04	IFNG (includes EG:15978),IL6,PTGS2	3
Hematological System Development and Function	adhesion	adhesion of lymphocytes	2,19E-04	CXCL9,IFNG (includes EG:15978),IL6,SELL	4
Immune Cell Trafficking	adhesion	adhesion of lymphocytes	2,19E-04	CXCL9,IFNG (includes EG:15978),IL6,SELL	4
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of lymphocytes	2,19E-04	CXCL9,IFNG (includes EG:15978),IL6,SELL	4
Tissue Development	adhesion	adhesion of lymphocytes	2,19E-04	CXCL9,IFNG (includes EG:15978),IL6,SELL	4
Dermatological Diseases and Conditions	plaque psoriasis	plaque psoriasis	2,27E-04	CSTA,CXCL10,CXCL9,IFNG (includes EG:15978)	4
Cellular Movement	chemotaxis	chemotaxis of endothelial cells	2,34E-04	CAMP (includes EG:12796),CXCR2,PTGS2	3
Cardiovascular System Development and Function	chemotaxis	chemotaxis of endothelial cells	2,34E-04	CAMP (includes EG:12796),CXCR2,PTGS2	3
Tissue Development	involution	involution	2,34E-04	CFTR,IL6,PTGS2	3
Organ Morphology	involution	involution	2,34E-04	CFTR,IL6,PTGS2	3
Cellular Development	proliferation	proliferation of mesangial cells	2,34E-04	CXCL10,CXCL9,IL6	3
Renal and Urological System Development and Function	proliferation	proliferation of mesangial cells	2,34E-04	CXCL10,CXCL9,IL6	3
Cellular Growth and Proliferation	infiltration	infiltration by lymphocytes	2,35E-04	CXCL10,IFNG (includes EG:15978),IL6,ZC3H12A	4
Cellular Movement	infiltration	infiltration by lymphocytes	2,35E-04	CXCL10,IFNG (includes EG:15978),IL6,ZC3H12A	4
Hematological System Development and Function	infiltration	infiltration by lymphocytes	2,35E-04	CXCL10,IFNG (includes EG:15978),IL6,ZC3H12A	4
Immune Cell Trafficking	infiltration	infiltration by lymphocytes	2,35E-04	CXCL10,IFNG (includes EG:15978),IL6,ZC3H12A	4
Cell Death and Survival	apoptosis	apoptosis of cholangiocarcinoma cell lines	2,38E-04	IFNG (includes EG:15978),IL6	2
Cell Death and Survival	apoptosis	apoptosis of chronic lymphocytic leukemia B cells	2,38E-04	IL6,MS4A1	2
Tumor Morphology	apoptosis	apoptosis of chronic lymphocytic leukemia B cells	2,38E-04	IL6,MS4A1	2
Cell Death and Survival	apoptosis	apoptosis of trophoblast cells	2,38E-04	IFNG (includes EG:15978),IL6	2
Embryonic Development	apoptosis	apoptosis of trophoblast cells	2,38E-04	IFNG (includes EG:15978),IL6	2
Cell Death and Survival	cell death	cell death of bronchial epithelial cells	2,38E-04	CAMP (includes EG:12796),IFNG (includes EG:15978)	2
Cellular Movement	chemoattraction	chemoattraction of monocytes	2,38E-04	CXCL10,CXCL9	2
Hematological System Development and Function	chemoattraction	chemoattraction of monocytes	2,38E-04	CXCL10,CXCL9	2
Immune Cell Trafficking	chemoattraction	chemoattraction of monocytes	2,38E-04	CXCL10,CXCL9	2
Inflammatory Response	chemoattraction	chemoattraction of monocytes	2,38E-04	CXCL10,CXCL9	2
Cell-To-Cell Signaling and Interaction	chemoattraction	chemoattraction of monocytes	2,38E-04	CXCL10,CXCL9	2
Cellular Movement	chemotaxis	chemotaxis of hematopoietic progenitor cells	2,38E-04	CXCL10,CXCL9	2
Hematological System Development and Function	chemotaxis	chemotaxis of hematopoietic progenitor cells	2,38E-04	CXCL10,CXCL9	2
Hematopoiesis	chemotaxis	chemotaxis of hematopoietic progenitor cells	2,38E-04	CXCL10,CXCL9	2
Hematological System Development and Function	colony formation	colony formation of granulocyte-macrophage progenitor cells	2,38E-04	IFNG (includes EG:15978),IL6	2
Hematopoiesis	colony formation	colony formation of granulocyte-macrophage progenitor cells	2,38E-04	IFNG (includes EG:15978),IL6	2
Cellular Growth and Proliferation	colony formation	colony formation of granulocyte-macrophage progenitor cells	2,38E-04	IFNG (includes EG:15978),IL6	2
Organismal Functions	healing	delay in healing	2,38E-04	IL6,PTGS2	2
Hematological System Development and Function	generation	generation of naive T lymphocytes	2,38E-04	IFNG (includes EG:15978),IL6	2
Tissue Development	generation	generation of naive T lymphocytes	2,38E-04	IFNG (includes EG:15978),IL6	2
Cellular Growth and Proliferation	generation	generation of naive T lymphocytes	2,38E-04	IFNG (includes EG:15978),IL6	2
Infectious Disease	infection	infection by Human cytomegalovirus	2,38E-04	CXCL10,CXCL9	2
Infectious Disease	infection	infection by human herpesvirus 4	2,38E-04	CXCL10,CXCL9	2
Inflammatory Response	pulmonary interstitial fibrosis	pulmonary interstitial fibrosis	2,38E-04	CFTR,PTGS2	2
Respiratory Disease	pulmonary interstitial fibrosis	pulmonary interstitial fibrosis	2,38E-04	CFTR,PTGS2	2
Connective Tissue Disorders	pulmonary interstitial fibrosis	pulmonary interstitial fibrosis	2,38E-04	CFTR,PTGS2	2
Inflammatory Disease	pulmonary interstitial fibrosis	pulmonary interstitial fibrosis	2,38E-04	CFTR,PTGS2	2
Organismal Injury and Abnormalities	pulmonary interstitial fibrosis	pulmonary interstitial fibrosis	2,38E-04	CFTR,PTGS2	2
Tissue Morphology	quantity	quantity of endocrine cell lines	2,38E-04	IFNG (includes EG:15978),IL6	2
Endocrine System Development and Function	quantity	quantity of endocrine cell lines	2,38E-04	IFNG (includes EG:15978),IL6	2
Hematological System Development and Function	regulation	regulation of antigen presenting cells	2,38E-04	IFNG (includes EG:15978),IL6	2
Cellular Function and Maintenance	regulation	regulation of antigen presenting cells	2,38E-04	IFNG (includes EG:15978),IL6	2
Cell-To-Cell Signaling and Interaction	communication	communication of cells	2,38E-04	CAMP (includes EG:12796),CFTR,CXCL10,CXCL9,IFNG (includes EG:15978),IL6	6
Hematological System Development and Function	quantity	quantity of neutrophils	2,39E-04	CXCR2,IFNG (includes EG:15978),IL6,MMP8,SELL	5
Inflammatory Response	quantity	quantity of neutrophils	2,39E-04	CXCR2,IFNG (includes EG:15978),IL6,MMP8,SELL	5
Tissue Morphology	quantity	quantity of neutrophils	2,39E-04	CXCR2,IFNG (includes EG:15978),IL6,MMP8,SELL	5
Hematological Disease	lymphomagenesis	lymphomagenesis	2,41E-04	CXCL10,CXCL9,IFNG (includes EG:15978),IL6,MS4A1,PTPRC,SELL	7
Cancer	lymphomagenesis	lymphomagenesis	2,41E-04	CXCL10,CXCL9,IFNG (includes EG:15978),IL6,MS4A1,PTPRC,SELL	7
Cellular Movement	localization	localization of cells	2,49E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6	3
Cellular Function and Maintenance	localization	localization of cells	2,49E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6	3
Cell-To-Cell Signaling and Interaction	binding	binding of endothelial cells	2,50E-04	CXCR2,IFNG (includes EG:15978),IL6,SELL	4
Cardiovascular System Development and Function	binding	binding of endothelial cells	2,50E-04	CXCR2,IFNG (includes EG:15978),IL6,SELL	4
Cellular Development	proliferation	proliferation of neuroglia	2,50E-04	CXCR2,IFNG (includes EG:15978),IL6,PTPRC	4
Cellular Growth and Proliferation	proliferation	proliferation of neuroglia	2,50E-04	CXCR2,IFNG (includes EG:15978),IL6,PTPRC	4
Nervous System Development and Function	proliferation	proliferation of neuroglia	2,50E-04	CXCR2,IFNG (includes EG:15978),IL6,PTPRC	4
Cell Morphology	shape change	shape change of connective tissue cells	2,66E-04	CXCR2,IFNG (includes EG:15978),IL6	3
Respiratory Disease	interstitial lung disease	interstitial lung disease	2,67E-04	CFTR,IFNG (includes EG:15978),MS4A1,PTGS2	4
Connective Tissue Disorders	interstitial lung disease	interstitial lung disease	2,67E-04	CFTR,IFNG (includes EG:15978),MS4A1,PTGS2	4
Cancer	hyperplasia	hyperplasia	2,73E-04	CFTR,FOXK2,SPR3,IFNG (includes EG:15978),IL6,PTGS2,PTPRC,SELL	8
Connective Tissue Disorders	rheumatoid arthritis	rheumatoid arthritis	2,79E-04	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,MS4A1,PTGS2,PTPRC,SLC7A11	9
Inflammatory Disease	rheumatoid arthritis	rheumatoid arthritis	2,79E-04	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,MS4A1,PTGS2,PTPRC,SLC7A11	9
Skeletal and Muscular Disorders	rheumatoid arthritis	rheumatoid arthritis	2,79E-04	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,MS4A1,PTGS2,PTPRC,SLC7A11	9
Immunological Disease	rheumatoid arthritis	rheumatoid arthritis	2,79E-04	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,MS4A1,PTGS2,PTPRC,SLC7A11	9
Gene Expression	induction	induction of RNA	2,82E-04	IFNG (includes EG:15978),IL6,PTPRC	3
Hematological System Development and Function	inhibition	inhibition of T lymphocytes	2,82E-04	IFNG (includes EG:15978),IL6,PTGS2	3
Cellular Growth and Proliferation	inhibition	inhibition of T lymphocytes	2,82E-04	IFNG (includes EG:15978),IL6,PTGS2	3
Inflammatory Response	phagocytosis	phagocytosis of tumor cell lines	2,82E-04	IFNG (includes EG:15978),IL6,MARCO	3

Cell-To-Cell Signaling and Interaction	phagocytosis	phagocytosis of tumor cell lines	2,82E-04	IFNG (includes EG:15978),IL6,MARCO	3
Cellular Function and Maintenance	phagocytosis	phagocytosis of tumor cell lines	2,82E-04	IFNG (includes EG:15978),IL6,MARCO	3
Organismal Injury and Abnormalities	injury	injury of liver	2,94E-04	CXCL10,CXCR2,IFNG (includes EG:15978),IL6	4
Gastrointestinal Disease	injury	injury of liver	2,94E-04	CXCL10,CXCR2,IFNG (includes EG:15978),IL6	4
Hepatic System Disease	injury	injury of liver	2,94E-04	CXCL10,CXCR2,IFNG (includes EG:15978),IL6	4
Tissue Morphology	abnormal morphology	abnormal morphology of cervical lymph node	2,97E-04	CXCR2,SELL	2
Lymphoid Tissue Structure and Development	abnormal morphology	abnormal morphology of cervical lymph node	2,97E-04	CXCR2,SELL	2
Organ Morphology	abnormal morphology	abnormal morphology of cervical lymph node	2,97E-04	CXCR2,SELL	2
Small Molecule Biochemistry	binding	binding of proteoglycan	2,97E-04	CXCL10,IFNG (includes EG:15978)	2
Carbohydrate Metabolism	binding	binding of proteoglycan	2,97E-04	CXCL10,IFNG (includes EG:15978)	2
Antimicrobial Response	clearance	clearance of Influenza virus	2,97E-04	IFNG (includes EG:15978),IL6	2
Hematological System Development and Function	detachment	detachment of leukocytes	2,97E-04	PTPRC,SELL	2
Immune Cell Trafficking	detachment	detachment of leukocytes	2,97E-04	PTPRC,SELL	2
Cell-To-Cell Signaling and Interaction	detachment	detachment of leukocytes	2,97E-04	PTPRC,SELL	2
Tissue Development	detachment	detachment of leukocytes	2,97E-04	PTPRC,SELL	2
Hematological System Development and Function	erythropoiesis	erythropoiesis of erythroid progenitor cells	2,97E-04	IFNG (includes EG:15978),IL6	2
Cardiovascular System Development and Function	erythropoiesis	erythropoiesis of erythroid progenitor cells	2,97E-04	IFNG (includes EG:15978),IL6	2
Tissue Development	erythropoiesis	erythropoiesis of erythroid progenitor cells	2,97E-04	IFNG (includes EG:15978),IL6	2
Cellular Development	erythropoiesis	erythropoiesis of erythroid progenitor cells	2,97E-04	IFNG (includes EG:15978),IL6	2
Hematopoiesis	erythropoiesis	erythropoiesis of erythroid progenitor cells	2,97E-04	IFNG (includes EG:15978),IL6	2
Organismal Development	erythropoiesis	erythropoiesis of erythroid progenitor cells	2,97E-04	IFNG (includes EG:15978),IL6	2
Carbohydrate Metabolism	excretion	excretion of carbohydrate	2,97E-04	IFNG (includes EG:15978),PPARGC1A	2
Hematological System Development and Function	generation	generation of Th1 cells	2,97E-04	IFNG (includes EG:15978),IL6	2
Tissue Development	generation	generation of Th1 cells	2,97E-04	IFNG (includes EG:15978),IL6	2
Cellular Growth and Proliferation	generation	generation of Th1 cells	2,97E-04	IFNG (includes EG:15978),IL6	2
Cellular Movement	migration	migration of bone marrow cell lines	2,97E-04	CXCL10,CXCL9	2
Cellular Development	osteoclastogenesis	osteoclastogenesis of macrophage cancer cell lines	2,97E-04	IFNG (includes EG:15978),IL6	2
Skeletal and Muscular System Development and Function	osteoclastogenesis	osteoclastogenesis of macrophage cancer cell lines	2,97E-04	IFNG (includes EG:15978),IL6	2
Cellular Movement	transmigration	transmigration of eosinophils	2,97E-04	CXCL10,CXCL9	2
Hematological System Development and Function	transmigration	transmigration of eosinophils	2,97E-04	CXCL10,CXCL9	2
Immune Cell Trafficking	transmigration	transmigration of eosinophils	2,97E-04	CXCL10,CXCL9	2
Hypersensitivity Response	transmigration	transmigration of eosinophils	2,97E-04	CXCL10,CXCL9	2
Hematological System Development and Function	binding	binding of macrophages	3,00E-04	IFNG (includes EG:15978),MARCO,PTPRC	3
Immune Cell Trafficking	binding	binding of macrophages	3,00E-04	IFNG (includes EG:15978),MARCO,PTPRC	3
Inflammatory Response	binding	binding of macrophages	3,00E-04	IFNG (includes EG:15978),MARCO,PTPRC	3
Cell-To-Cell Signaling and Interaction	binding	binding of macrophages	3,00E-04	IFNG (includes EG:15978),MARCO,PTPRC	3
Tissue Development	binding	binding of macrophages	3,00E-04	IFNG (includes EG:15978),MARCO,PTPRC	3
Cell-To-Cell Signaling and Interaction	response	response of mononuclear leukocytes	3,01E-04	CAMP (includes EG:12796),CXCL9,IFNG (includes EG:15978),IL6,PTPRC	5
Cellular Development	differentiation	differentiation of keratinocytes	3,03E-04	CSTA,IFNG (includes EG:15978),IL6,PTGS2	4
Hair and Skin Development and Function	differentiation	differentiation of keratinocytes	3,03E-04	CSTA,IFNG (includes EG:15978),IL6,PTGS2	4
Hematological Disease	eosinophilia	eosinophilia	3,03E-04	Ch13/Ch134,CXCL9,IFNG (includes EG:15978),PPARGC1A	4
Immunological Disease	eosinophilia	eosinophilia	3,03E-04	Ch13/Ch134,CXCL9,IFNG (includes EG:15978),PPARGC1A	4
Lipid Metabolism	steroidogenesis	steroidogenesis	3,33E-04	APOB,CFTR,CXCL10,IFNG (includes EG:15978),IL6	5
Small Molecule Biochemistry	steroidogenesis	steroidogenesis	3,33E-04	APOB,CFTR,CXCL10,IFNG (includes EG:15978),IL6	5
Cellular Movement	cell movement	cell movement of epithelial cells	3,42E-04	CXCL10,IFNG (includes EG:15978),IL6,SELL	4
Cellular Movement	infiltration	infiltration by macrophages	3,52E-04	CXCL10,IFNG (includes EG:15978),PTGS2,SELL	4
Hematological System Development and Function	infiltration	infiltration by macrophages	3,52E-04	CXCL10,IFNG (includes EG:15978),PTGS2,SELL	4
Immune Cell Trafficking	infiltration	infiltration by macrophages	3,52E-04	CXCL10,IFNG (includes EG:15978),PTGS2,SELL	4
Inflammatory Response	infiltration	infiltration by macrophages	3,52E-04	CXCL10,IFNG (includes EG:15978),PTGS2,SELL	4
Endocrine System Disorders	diabetes mellitus	diabetes mellitus	3,58E-04	APOB,FABP2,FOXA2,IFNG (includes EG:15978),IL6,MS4A1,PTGS2,SELL,SLC7A11	9
Metabolic Disease	diabetes mellitus	diabetes mellitus	3,58E-04	APOB,FABP2,FOXA2,IFNG (includes EG:15978),IL6,MS4A1,PTGS2,SELL,SLC7A11	9
Gastrointestinal Disease	diabetes mellitus	diabetes mellitus	3,58E-04	APOB,FABP2,FOXA2,IFNG (includes EG:15978),IL6,MS4A1,PTGS2,SELL,SLC7A11	9
Small Molecule Biochemistry	diabetes mellitus	diabetes mellitus	3,58E-04	APOB,FABP2,FOXA2,IFNG (includes EG:15978),IL6,MS4A1,PTGS2,SELL,SLC7A11	9
Cell Signaling	synthesis	synthesis of nitric oxide	3,59E-04	ACE2 (includes EG:302668),CAMP (includes EG:12796),CFTR,IFNG (includes EG:15978),IL6,PTGS2	6
Tissue Development	branching morphogenesis	branching morphogenesis of lung	3,62E-04	ACE2 (includes EG:302668),CAMP (includes EG:12796),CFTR,IFNG (includes EG:15978),IL6,PTGS2	6
Organ Morphology	branching morphogenesis	branching morphogenesis of lung	3,62E-04	FOX A2,IL6	2
Embryonic Development	branching morphogenesis	branching morphogenesis of lung	3,62E-04	FOX A2,IL6	2
Organismal Development	branching morphogenesis	branching morphogenesis of lung	3,62E-04	FOX A2,IL6	2
Organ Development	branching morphogenesis	branching morphogenesis of lung	3,62E-04	FOX A2,IL6	2
Respiratory System Development and Function	branching morphogenesis	branching morphogenesis of lung	3,62E-04	FOX A2,IL6	2
Small Molecule Biochemistry	catabolism	catabolism of L-tryptophan	3,62E-04	IFNG (includes EG:15978),IL6	2
Amino Acid Metabolism	catabolism	catabolism of L-tryptophan	3,62E-04	IFNG (includes EG:15978),IL6	2
Neurological Disease	demyelination	demyelination of cells	3,62E-04	IFNG (includes EG:15978),IL6	2
Cellular Compromise	depletion	depletion of B lymphocytes	3,62E-04	IFNG (includes EG:15978),MS4A1	2
Hematological System Development and Function	expansion	expansion of Th17 cells	3,62E-04	IFNG (includes EG:15978),IL6	2
Cellular Development	expansion	expansion of Th17 cells	3,62E-04	IFNG (includes EG:15978),IL6	2
Cellular Growth and Proliferation	expansion	expansion of Th17 cells	3,62E-04	IFNG (includes EG:15978),IL6	2
Cellular Movement	infiltration	infiltration by mast cells	3,62E-04	CFTR,SELL	2
Hematological System Development and Function	infiltration	infiltration by mast cells	3,62E-04	CFTR,SELL	2
Immune Cell Trafficking	infiltration	infiltration by mast cells	3,62E-04	CFTR,SELL	2
Inflammatory Response	infiltration	infiltration by mast cells	3,62E-04	CFTR,SELL	2
Hypersensitivity Response	infiltration	infiltration by mast cells	3,62E-04	CFTR,SELL	2
Infectious Disease	replication	replication of Coxsackievirus B3	3,62E-04	IFNG (includes EG:15978),PTPRC	2
Hematological System Development and Function	proliferation	proliferation of hematopoietic progenitor cells	3,67E-04	CXCL10,IFNG (includes EG:15978),IL6,PTGS2,PTPRC	5
Cellular Development	proliferation	proliferation of hematopoietic progenitor cells	3,67E-04	CXCL10,IFNG (includes EG:15978),IL6,PTGS2,PTPRC	5
Hematopoiesis	proliferation	proliferation of hematopoietic progenitor cells	3,67E-04	CXCL10,IFNG (includes EG:15978),IL6,PTGS2,PTPRC	5
Cellular Growth and Proliferation	proliferation	proliferation of hematopoietic progenitor cells	3,67E-04	CXCL10,IFNG (includes EG:15978),IL6,PTGS2,PTPRC	5
Tissue Development	aggregation	aggregation of cells	3,70E-04	CXCL10,CXCL9,IL6,PTGS2,PTPRC,SELL	6
Cancer	growth	growth of carcinoma	3,77E-04	CXCR2,IL6,PTGS2	3
Tumor Morphology	regression	regression of tumor	3,77E-04	CXCL10,CXCL9,IFNG (includes EG:15978)	3
Cell Death and Survival	cytolysis	cytolysis of tumor	3,89E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6,MS4A1,PTPRC	5
Inflammatory Disease	experimental autoimmune encephalomyelitis	experimental autoimmune encephalomyelitis	3,89E-04	CXCL10,IFNG (includes EG:15978),IL6,PTPRC,SELL	5
Immunological Disease	experimental autoimmune encephalomyelitis	experimental autoimmune encephalomyelitis	3,89E-04	CXCL10,IFNG (includes EG:15978),IL6,PTPRC,SELL	5
Neurological Disease	experimental autoimmune encephalomyelitis	experimental autoimmune encephalomyelitis	3,89E-04	CXCL10,IFNG (includes EG:15978),IL6,PTPRC,SELL	5
Cell Death and Survival	cell death	cell death of B lymphocytes	3,95E-04	IFNG (includes EG:15978),IL6,MS4A1,PTPRC	4
Lipid Metabolism	quantity	quantity of polyunsaturated fatty acids	3,95E-04	CFTR,HPGD,IFNG (includes EG:15978),PTGS2	4
Small Molecule Biochemistry	quantity	quantity of polyunsaturated fatty acids	3,95E-04	CFTR,HPGD,IFNG (includes EG:15978),PTGS2	4
Molecular Transport	quantity	quantity of polyunsaturated fatty acids	3,95E-04	CFTR,HPGD,IFNG (includes EG:15978),PTGS2	4

Infectious Disease	hepatitis C	hepatitis C	3,98E-04	IFNG (includes EG:15978),IL6,PTPRC	3
Inflammatory Disease	hepatitis C	hepatitis C	3,98E-04	IFNG (includes EG:15978),IL6,PTPRC	3
Gastrointestinal Disease	hepatitis C	hepatitis C	3,98E-04	IFNG (includes EG:15978),IL6,PTPRC	3
Hepatic System Disease	hepatitis C	hepatitis C	3,98E-04	IFNG (includes EG:15978),IL6,PTPRC	3
Small Molecule Biochemistry	synthesis	synthesis of nitrite	3,98E-04	IFNG (includes EG:15978),IL6,ZC3H12A	3
Lipid Metabolism	synthesis	synthesis of lipid	4,12E-04	ACSM3,APOB,CFTR,CXCL10,HPGD,IFNG (includes EG:15978),IL6,PPARGC1A,PTGS2	9
Small Molecule Biochemistry	synthesis	synthesis of lipid	4,12E-04	ACSM3,APOB,CFTR,CXCL10,HPGD,IFNG (includes EG:15978),IL6,PPARGC1A,PTGS2	9
Cell-To-Cell Signaling and Interaction	contact growth inhibition	contact growth inhibition of leukocytes	4,34E-04	IFNG (includes EG:15978),PTPRC	2
Cellular Growth and Proliferation	contact growth inhibition	contact growth inhibition of leukocytes	4,34E-04	IFNG (includes EG:15978),PTPRC	2
Cell Cycle	contact growth inhibition	contact growth inhibition of leukocytes	4,34E-04	IFNG (includes EG:15978),PTPRC	2
Lipid Metabolism	conversion	conversion of arachidonic acid	4,34E-04	CFTR,PTGS2	2
Small Molecule Biochemistry	conversion	conversion of arachidonic acid	4,34E-04	CFTR,PTGS2	2
Cell-To-Cell Signaling and Interaction	induction	induction of tumor cell lines	4,34E-04	IFNG (includes EG:15978),IL6	2
Cellular Growth and Proliferation	induction	induction of tumor cell lines	4,34E-04	IFNG (includes EG:15978),IL6	2
Skeletal and Muscular System Development and Function	muscularization	muscularization	4,34E-04	ACE2 (includes EG:302668),IL6	2
Cell-To-Cell Signaling and Interaction	stimulation	stimulation of cancer cells	4,34E-04	IFNG (includes EG:15978),IL6	2
Cancer	stimulation	stimulation of cancer cells	4,34E-04	IFNG (includes EG:15978),IL6	2
Cellular Growth and Proliferation	stimulation	stimulation of cancer cells	4,34E-04	IFNG (includes EG:15978),IL6	2
Tumor Morphology	stimulation	stimulation of cancer cells	4,34E-04	IFNG (includes EG:15978),IL6	2
Cell-To-Cell Signaling and Interaction	stimulation	stimulation of leukemia cell lines	4,34E-04	IFNG (includes EG:15978),IL6	2
Cellular Growth and Proliferation	stimulation	stimulation of leukemia cell lines	4,34E-04	IFNG (includes EG:15978),IL6	2
Cellular Movement	cell movement	cell movement of peripheral blood leukocytes	4,42E-04	CAMP (includes EG:12796),CXCL9,SELL	3
Hematological System Development and Function	cell movement	cell movement of peripheral blood leukocytes	4,42E-04	CAMP (includes EG:12796),CXCL9,SELL	3
Immune Cell Trafficking	cell movement	cell movement of peripheral blood leukocytes	4,42E-04	CAMP (includes EG:12796),CXCL9,SELL	3
Cardiovascular System Development and Function	development	development of blood vessel	4,62E-04	ACE2 (includes EG:302668),APOB,CAMP (includes EG:12796),CXCL10,CXCR2,IFNG (includes EG:15978),IL6,PTGS2,SELL	9
Organismal Development	development	development of blood vessel	4,62E-04	ACE2 (includes EG:302668),APOB,CAMP (includes EG:12796),CXCL10,CXCR2,IFNG (includes EG:15978),IL6,PTGS2,SELL	9
Cell Death and Survival	killing	killing of bacteria	4,65E-04	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978)	3
Cellular Movement	recruitment	recruitment of T lymphocytes	4,65E-04	CXCL10,CXCL9,IFNG (includes EG:15978)	3
Hematological System Development and Function	recruitment	recruitment of T lymphocytes	4,65E-04	CXCL10,CXCL9,IFNG (includes EG:15978)	3
Immune Cell Trafficking	recruitment	recruitment of T lymphocytes	4,65E-04	CXCL10,CXCL9,IFNG (includes EG:15978)	3
Cell-To-Cell Signaling and Interaction	recruitment	recruitment of T lymphocytes	4,65E-04	CXCL10,CXCL9,IFNG (includes EG:15978)	3
Cell-mediated Immune Response	recruitment	recruitment of T lymphocytes	4,65E-04	CXCL10,CXCL9,IFNG (includes EG:15978)	3
Connective Tissue Disorders	rheumatic disease	Rheumatic Disease	4,67E-04	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,MMP8,MS4A1,PTGS2,PTPRC,SLC7A11	11
Inflammatory Disease	rheumatic disease	Rheumatic Disease	4,67E-04	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,MMP8,MS4A1,PTGS2,PTPRC,SLC7A11	11
Skeletal and Muscular Disorders	rheumatic disease	Rheumatic Disease	4,67E-04	CAMP (includes EG:12796),CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978),IL6,MMP8,MS4A1,PTGS2,PTPRC,SLC7A11	11
Cellular Growth and Proliferation	colony formation	colony formation of tumor cell lines	4,68E-04	FOXA2,HPGD,IFNG (includes EG:15978),IL6,PTGS2	5
Cellular Development	maturation	maturation of leukocytes	4,68E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6,PTGS2,PTPRC	5
Hematopoiesis	maturation	maturation of leukocytes	4,68E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6,PTGS2,PTPRC	5
Inflammatory Response	pneumonia	pneumonia	4,80E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),MS4A1,PTGS2	4
Respiratory Disease	pneumonia	pneumonia	4,80E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),MS4A1,PTGS2	4
Hematological System Development and Function	stimulation	stimulation of phagocytes	4,89E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6	3
Inflammatory Response	stimulation	stimulation of phagocytes	4,89E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6	3
Cell-To-Cell Signaling and Interaction	stimulation	stimulation of phagocytes	4,89E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6	3
Cellular Growth and Proliferation	stimulation	stimulation of phagocytes	4,89E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6	3
Lipid Metabolism	synthesis	synthesis of eicosanoid	5,03E-04	CFTR,HPGD,IFNG (includes EG:15978),IL6,PTGS2	5
Small Molecule Biochemistry	synthesis	synthesis of eicosanoid	5,03E-04	CFTR,HPGD,IFNG (includes EG:15978),IL6,PTGS2	5
Humoral Immune Response	quantity	quantity of IgM	5,06E-04	IFNG (includes EG:15978),MARCO,PTGS2,ZC3H12A	4
Protein Synthesis	quantity	quantity of IgM	5,06E-04	IFNG (includes EG:15978),MARCO,PTGS2,ZC3H12A	4
Neurological Disease	damage	damage of axons	5,12E-04	IFNG (includes EG:15978),IL6	2
Hematological System Development and Function	differentiation	differentiation of bone-marrow-derived monocyte/macrophage precursor cells	5,12E-04	IFNG (includes EG:15978),IL6	2
Cellular Development	differentiation	differentiation of bone-marrow-derived monocyte/macrophage precursor cells	5,12E-04	IFNG (includes EG:15978),IL6	2
Hematopoiesis	differentiation	differentiation of bone-marrow-derived monocyte/macrophage precursor cells	5,12E-04	IFNG (includes EG:15978),IL6	2
Organismal Functions	healing	healing of bone	5,12E-04	IL6,PTGS2	2
Respiratory Disease	hyperreactivity	hyperreactivity of airway	5,12E-04	CXCL10,CXCL9	2
Organismal Injury and Abnormalities	hyperreactivity	hyperreactivity of airway	5,12E-04	CXCL10,CXCL9	2
Inflammatory Response	immune response	immune response of B lymphocytes	5,12E-04	IFNG (includes EG:15978),PTPRC	2
Cell-To-Cell Signaling and Interaction	immune response	immune response of B lymphocytes	5,12E-04	IFNG (includes EG:15978),PTPRC	2
Humoral Immune Response	immune response	immune response of B lymphocytes	5,12E-04	IFNG (includes EG:15978),PTPRC	2
Cellular Movement	migration	migration of mesangial cells	5,12E-04	CXCL10,CXCL9	2
Renal and Urological System Development and Function	migration	migration of mesangial cells	5,12E-04	CXCL10,CXCL9	2
Cellular Movement	migration	migration of plasmacytoid dendritic cells	5,12E-04	CXCL10,CXCL9	2
Hematological System Development and Function	migration	migration of plasmacytoid dendritic cells	5,12E-04	CXCL10,CXCL9	2
Immune Cell Trafficking	migration	migration of plasmacytoid dendritic cells	5,12E-04	CXCL10,CXCL9	2
Inflammatory Response	migration	migration of plasmacytoid dendritic cells	5,12E-04	CXCL10,CXCL9	2
Hematological System Development and Function	quantity	quantity of peripheral T lymphocyte	5,12E-04	IL6,PTPRC	2
Tissue Morphology	quantity	quantity of peripheral T lymphocyte	5,12E-04	IL6,PTPRC	2
Lipid Metabolism	quantity	quantity of ceramide	5,14E-04	CFTR,IFNG (includes EG:15978),IL6	3
Small Molecule Biochemistry	quantity	quantity of ceramide	5,14E-04	CFTR,IFNG (includes EG:15978),IL6	3
Molecular Transport	quantity	quantity of ceramide	5,14E-04	CFTR,IFNG (includes EG:15978),IL6	3
Hematological System Development and Function	lymphopoiesis	lymphopoiesis	5,40E-04	IFNG (includes EG:15978),IL6,PTPRC	3
Cellular Development	lymphopoiesis	lymphopoiesis	5,40E-04	IFNG (includes EG:15978),IL6,PTPRC	3
Hematopoiesis	lymphopoiesis	lymphopoiesis	5,40E-04	IFNG (includes EG:15978),IL6,PTPRC	3
Protein Synthesis	quantity	quantity of cytokine	5,40E-04	IFNG (includes EG:15978),IL6,PTPRC	3
Hematological System Development and Function	aggregation	aggregation of blood cells	5,50E-04	CXCR2,FABP2,IFNG (includes EG:15978),IL6,PTGS2	5
Tissue Development	aggregation	aggregation of blood cells	5,50E-04	CXCL10,CXCL9,IL6,PTGS2,SELL	5
Lipid Metabolism	synthesis	synthesis of prostaglandin E2	5,62E-04	CXCL10,CXCL9,IL6,PTGS2,SELL	5
Small Molecule Biochemistry	synthesis	synthesis of prostaglandin E2	5,62E-04	HPGD,IFNG (includes EG:15978),IL6,PTGS2	4
Drug Metabolism	synthesis	synthesis of prostaglandin E2	5,62E-04	HPGD,IFNG (includes EG:15978),IL6,PTGS2	4
Inflammatory Response	inflammation	inflammation of intestine	5,79E-04	HPGD,IFNG (includes EG:15978),IL6,PTGS2	4
Infectious Disease	infection	Viral Infection	5,91E-04	HPGD,IFNG (includes EG:15978),IL6,MS4A1,PTGS2	4
Cell-To-Cell Signaling and Interaction	activation	activation of endothelial cells	5,93E-04	ACE2 (includes EG:302668),APOB,CAMP (includes EG:12796),CFTR,CXCL10,CXCL9,CXCR2,HPGD,IFNG (includes EG:15978),IL6,PM20D1,PPARGC1A,PTGS2,PTPRC	14
Cardiovascular System Development and Function	activation	activation of endothelial cells	5,93E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6	3
Metabolic Disease	albuminuria	albuminuria	5,93E-04	IFNG (includes EG:15978),IL6,PTGS2	3
Renal and Urological Disease	albuminuria	albuminuria	5,93E-04	IFNG (includes EG:15978),IL6,PTGS2	3
Cell Cycle	interphase	arrest in interphase of melanoma cell lines	5,96E-04	IFNG (includes EG:15978),IL6	2
Antimicrobial Response	clearance	clearance of bacteria	5,96E-04	IFNG (includes EG:15978),MARCO	2
Cell Death and Survival	killing	killing of macrophages	5,96E-04	CAMP (includes EG:12796),IFNG (includes EG:15978)	2
Hematological System Development and Function	regulation	regulation of phagocytes	5,96E-04	IFNG (includes EG:15978),IL6	2
Inflammatory Response	regulation	regulation of phagocytes	5,96E-04	IFNG (includes EG:15978),IL6	2

Cellular Function and Maintenance	regulation	regulation of macrophages	5,96E-04	IFNG (includes EG:15978),IL6	2
Cell-To-Cell Signaling and Interaction	response	response of macrophage cancer cell lines	5,96E-04	IFNG (includes EG:15978),MARCO	2
Metabolic Diseases	glucose metabolism disorder	glucose metabolism disorder	6,05E-04	APOB,FABP2,FOXO2,IFNG (includes EG:15978),IL6,MS4A1,PPARGC1A,PTGS2,SELL,SLC7A11	10
Connective Tissue Disorders	systemic lupus erythematosus	systemic lupus erythematosus	6,07E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),MMP8,PTPRC	4
Inflammatory Disease	systemic lupus erythematosus	systemic lupus erythematosus	6,07E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),MMP8,PTPRC	4
Skeletal and Muscular Disorders	systemic lupus erythematosus	systemic lupus erythematosus	6,07E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),MMP8,PTPRC	4
Immunological Disease	systemic lupus erythematosus	systemic lupus erythematosus	6,07E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),MMP8,PTPRC	4
Cardiovascular System Development and Function	angiogenesis	angiogenesis	6,08E-04	APOB,CAMP (includes EG:12796),CXCL10,CXCL9,IFNG (includes EG:15978),IL6,PTGS2,SELL	8
Inflammatory Response	TH1 immune response	TH1 immune response	6,21E-04	CXCL10,IFNG (includes EG:15978),IL6	3
Cardiovascular System Development and Function	abnormal morphology	abnormal morphology of left ventricle	6,21E-04	ACE2 (includes EG:302668),IL6,PPARGC1A	2
Organ Morphology	abnormal morphology	abnormal morphology of left ventricle	6,21E-04	ACE2 (includes EG:302668),IL6,PPARGC1A	3
Cell-To-Cell Signaling and Interaction	binding	binding of vascular endothelial cells	6,21E-04	CXCR2,IFNG (includes EG:15978),SELL	3
Cardiovascular System Development and Function	binding	binding of vascular endothelial cells	6,21E-04	CXCR2,IFNG (includes EG:15978),SELL	3
Cellular Movement	migration	migration of colon cancer cell lines	6,21E-04	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978)	3
Inflammatory Response	ulcerative colitis	ulcerative colitis	6,50E-04	HPGD,MS4A1,PTGS2	3
Inflammatory Disease	ulcerative colitis	ulcerative colitis	6,50E-04	HPGD,MS4A1,PTGS2	3
Gastrointestinal Disease	ulcerative colitis	ulcerative colitis	6,50E-04	HPGD,MS4A1,PTGS2	3
Cellular Growth and Proliferation	inhibition	inhibition of cells	6,54E-04	CXCL10,IFNG (includes EG:15978),IL6,PTGS2	4
Inflammatory Disease	pancreatitis	Pancreatitis	6,80E-04	CFTR,IFNG (includes EG:15978),PTGS2	3
Endocrine System Disorders	pancreatitis	Pancreatitis	6,80E-04	CFTR,IFNG (includes EG:15978),PTGS2	3
Gastrointestinal Disease	pancreatitis	Pancreatitis	6,80E-04	CFTR,IFNG (includes EG:15978),PTGS2	3
Carbohydrate Metabolism	quantity	quantity of carbohydrate	6,83E-04	CAMP (includes EG:12796),FABP2,FOXO2,IFNG (includes EG:15978),IL6,PPARGC1A,PTGS2	7
Molecular Transport	accumulation	accumulation of anion	6,87E-04	IFNG (includes EG:15978),IL6	2
Cell Death and Survival	apoptosis	apoptosis of airway epithelial cells	6,87E-04	CAMP (includes EG:12796),IFNG (includes EG:15978)	2
Cellular Movement	cell movement	cell movement of monocyte-derived macrophages	6,87E-04	CAMP (includes EG:12796),SELL	2
Hematological System Development and Function	cell movement	cell movement of monocyte-derived macrophages	6,87E-04	CAMP (includes EG:12796),SELL	2
Immune Cell Trafficking	cell movement	cell movement of monocyte-derived macrophages	6,87E-04	CAMP (includes EG:12796),SELL	2
Inflammatory Response	cell movement	cell movement of monocyte-derived macrophages	6,87E-04	CAMP (includes EG:12796),SELL	2
Cellular Movement	cell rolling	cell rolling of T lymphocytes	6,87E-04	IFNG (includes EG:15978),SELL	2
Hematological System Development and Function	cell rolling	cell rolling of T lymphocytes	6,87E-04	IFNG (includes EG:15978),SELL	2
Immune Cell Trafficking	cell rolling	cell rolling of T lymphocytes	6,87E-04	IFNG (includes EG:15978),SELL	2
Cell-mediated Immune Response	cell rolling	cell rolling of T lymphocytes	6,87E-04	IFNG (includes EG:15978),SELL	2
Cellular Movement	extravasation	extravasation of granulocytes	6,87E-04	Ch33/Chi34,SELL	2
Hematological System Development and Function	extravasation	extravasation of granulocytes	6,87E-04	Ch33/Chi34,SELL	2
Small Molecule Biochemistry	formation	formation of hydrogen peroxide	6,87E-04	IFNG (includes EG:15978),IL6	2
Free Radical Scavenging	formation	formation of hydrogen peroxide	6,87E-04	IFNG (includes EG:15978),IL6	2
Cell Death and Survival	killing	killing of leukemia cell lines	6,87E-04	CAMP (includes EG:12796),IFNG (includes EG:15978)	2
Organismal Injury and Abnormalities	atherogenesis	atherogenesis	7,11E-04	APOB,CXCL10,IFNG (includes EG:15978)	3
Cardiovascular Disease	atherogenesis	atherogenesis	7,11E-04	APOB,CXCL10,IFNG (includes EG:15978)	3
Carbohydrate Metabolism	binding	binding of polysaccharide	7,11E-04	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978)	3
Cellular Movement	cell movement	cell movement of hematopoietic progenitor cells	7,11E-04	CXCL10,CXCL9,IFNG (includes EG:15978)	3
Hematological System Development and Function	cell movement	cell movement of hematopoietic progenitor cells	7,11E-04	CXCL10,CXCL9,IFNG (includes EG:15978)	3
Cellular Movement	migration	migration of keratinocytes	7,11E-04	CXCL10,IL6,SELL	3
Hair and Skin Development and Function	migration	migration of keratinocytes	7,11E-04	CXCL10,IL6,SELL	3
Cellular Movement	mobilization	mobilization of blood cells	7,11E-04	CXCL10,IFNG (includes EG:15978),SELL	3
Hematological System Development and Function	mobilization	mobilization of blood cells	7,11E-04	CXCL10,IFNG (includes EG:15978),SELL	3
Immunological Disease	allergy	allergy	7,21E-04	CAMP (includes EG:12796),Ch33/Chi34,IFNG (includes EG:15978),PTGS2	4
Cellular Movement	cell movement	cell movement of dendritic cells	7,21E-04	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978)	4
Hematological System Development and Function	cell movement	cell movement of dendritic cells	7,21E-04	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978)	4
Immune Cell Trafficking	cell movement	cell movement of dendritic cells	7,21E-04	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978)	4
Inflammatory Response	cell movement	cell movement of dendritic cells	7,21E-04	CXCL10,CXCL9,CXCR2,IFNG (includes EG:15978)	4
Cell Death and Survival	apoptosis	apoptosis of leukemia cells	7,42E-04	IFNG (includes EG:15978),IL6,MS4A1	3
Tumor Morphology	apoptosis	apoptosis of leukemia cells	7,42E-04	IFNG (includes EG:15978),IL6,MS4A1	3
Cell Death and Survival	cell death	cell death of hepatoma cell lines	7,56E-04	IFNG (includes EG:15978),IL6,PTGS2,SLC7A11	4
Organismal Injury and Abnormalities	fibrosis	fibrosis	7,71E-04	ACE2 (includes EG:302668),CFTR,CXCL9,IFNG (includes EG:15978),IL6,PTGS2,SELL	7
Respiratory Disease	asthma	Asthma	7,75E-04	CXCL10,IFNG (includes EG:15978),PTGS2,PTPRC	4
Inflammatory Disease	asthma	Asthma	7,75E-04	CXCL10,IFNG (includes EG:15978),PTGS2,PTPRC	4
Cell Death and Survival	apoptosis	apoptosis of carcinoma cell lines	7,75E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6,PTGS2	4
Hematological System Development and Function	activation	activation of monocyte-derived dendritic cells	7,84E-04	IFNG (includes EG:15978),IL6	2
Immune Cell Trafficking	activation	activation of monocyte-derived dendritic cells	7,84E-04	IFNG (includes EG:15978),IL6	2
Inflammatory Response	activation	activation of monocyte-derived dendritic cells	7,84E-04	IFNG (includes EG:15978),IL6	2
Cell-To-Cell Signaling and Interaction	activation	activation of monocyte-derived dendritic cells	7,84E-04	IFNG (includes EG:15978),IL6	2
Cellular Movement	chemotaxis	chemotaxis of microglia	7,84E-04	CXCL10,CXCL9	2
Hematological System Development and Function	chemotaxis	chemotaxis of microglia	7,84E-04	CXCL10,CXCL9	2
Immune Cell Trafficking	chemotaxis	chemotaxis of microglia	7,84E-04	CXCL10,CXCL9	2
Inflammatory Response	chemotaxis	chemotaxis of microglia	7,84E-04	CXCL10,CXCL9	2
Nervous System Development and Function	chemotaxis	chemotaxis of microglia	7,84E-04	CXCL10,CXCL9	2
Hematological System Development and Function	colony formation	colony formation of colony-forming units granulocytes	7,84E-04	IFNG (includes EG:15978),IL6	2
Hematopoiesis	colony formation	colony formation of colony-forming units granulocytes	7,84E-04	IFNG (includes EG:15978),IL6	2
Cellular Growth and Proliferation	colony formation	colony formation of colony-forming units granulocytes	7,84E-04	IFNG (includes EG:15978),IL6	2
Cancer	hyperplasia	hyperplasia of goblet cells	7,84E-04	FOXA2,IFNG (includes EG:15978)	2
Hematological System Development and Function	induction	induction of helper T lymphocytes	7,84E-04	IFNG (includes EG:15978),IL6	2
Cell-To-Cell Signaling and Interaction	induction	induction of helper T lymphocytes	7,84E-04	IFNG (includes EG:15978),IL6	2
Cellular Growth and Proliferation	induction	induction of helper T lymphocytes	7,84E-04	IFNG (includes EG:15978),IL6	2
Connective Tissue Disorders	damage	damage of cartilage tissue	8,08E-04	IFNG (includes EG:15978),IL6,PTGS2	3
Skeletal and Muscular Disorders	damage	damage of cartilage tissue	8,08E-04	IFNG (includes EG:15978),IL6,PTGS2	3
Tissue Morphology	damage	damage of cartilage tissue	8,08E-04	IFNG (includes EG:15978),IL6,PTGS2	3
Organismal Injury and Abnormalities	damage	damage of cartilage tissue	8,08E-04	IFNG (includes EG:15978),IL6,PTGS2	3
Infectious Disease	infection	infection by Herpesviridae	8,08E-04	CXCL10,CXCL9,CXCR2	2
Cell Death and Survival	necrosis	necrosis of liver	8,08E-04	IFNG (includes EG:15978),IL6,PTGS2,PTPRC,SELL	5
Cancer	digestive organ tumor	digestive organ tumor	8,29E-04	AADAC,AGR3,CFTR,CXCL10,CXCR2,FOXO2,IFNG (includes EG:15978),IL6,MS4A1,PTGS2,PTPRC,SLC7A11,UGT2B7	13
Gastrointestinal Disease	digestive organ tumor	digestive organ tumor	8,29E-04	AADAC,AGR3,CFTR,CXCL10,CXCR2,FOXO2,IFNG (includes EG:15978),IL6,MS4A1,PTGS2,PTPRC,SLC7A11,UGT2B7	13
Infectious Disease	infection	Parasitic Infection	8,31E-04	CXCR2,IFNG (includes EG:15978),IL6,PTGS2	4
Hematological System Development and Function	accumulation	accumulation of T lymphocytes	8,42E-04	CXCL10,IFNG (includes EG:15978),IL6	3
Immune Cell Trafficking	accumulation	accumulation of T lymphocytes	8,42E-04	CXCL10,IFNG (includes EG:15978),IL6	3
Inflammatory Response	accumulation	accumulation of T lymphocytes	8,42E-04	CXCL10,IFNG (includes EG:15978),IL6	3
Tissue Development	infiltration	accumulation of T lymphocytes	8,42E-04	CXCL10,IFNG (includes EG:15978),IL6	3
Cellular Movement	infiltration	infiltration by T lymphocytes	8,42E-04	CXCL10,IFNG (includes EG:15978),IL6	3
Hematological System Development and Function	infiltration	infiltration by T lymphocytes	8,42E-04	CXCL10,IFNG (includes EG:15978),IL6	3

Immune Cell Trafficking	infiltration	infiltration by T lymphocytes	8,42E-04	CXCL10,IFNG (includes EG:15978),IL6	3
Cell-mediated Immune Response	infiltration	infiltration by T lymphocytes	8,42E-04	CXCL10,IFNG (includes EG:15978),IL6	3
Hematological System Development and Function	quantity	quantity of phagocytes	8,48E-04	CXCL10,CXCR2,IFNG (includes EG:15978),IL6,MMP8,SELL	6
Inflammatory Response	quantity	quantity of phagocytes	8,48E-04	CXCL10,CXCR2,IFNG (includes EG:15978),IL6,MMP8,SELL	6
Tissue Morphology	quantity	quantity of phagocytes	8,48E-04	CXCL10,CXCR2,IFNG (includes EG:15978),IL6,MMP8,SELL	6
Hematological System Development and Function	binding	binding of T lymphocytes	8,77E-04	CXCL10,CXCL9,IFNG (includes EG:15978)	3
Cell-To-Cell Signaling and Interaction	binding	binding of T lymphocytes	8,77E-04	CXCL10,CXCL9,IFNG (includes EG:15978)	3
Tissue Development	binding	binding of T lymphocytes	8,77E-04	CXCL10,CXCL9,IFNG (includes EG:15978)	3
Energy Production	oxidation	oxidation of long chain fatty acid	8,77E-04	FABP2,IL6,PPARGC1A	3
Lipid Metabolism	oxidation	oxidation of long chain fatty acid	8,77E-04	FABP2,IL6,PPARGC1A	3
Small Molecule Biochemistry	oxidation	oxidation of long chain fatty acid	8,77E-04	FABP2,IL6,PPARGC1A	3
Cell-To-Cell Signaling and Interaction	binding	binding of hepatoma cell lines	8,87E-04	CXCL10,IL6	2
Cellular Movement	chemoattraction	chemoattraction of T lymphocytes	8,87E-04	CXCL10,CXCL9	2
Hematological System Development and Function	chemoattraction	chemoattraction of T lymphocytes	8,87E-04	CXCL10,CXCL9	2
Immune Cell Trafficking	chemoattraction	chemoattraction of T lymphocytes	8,87E-04	CXCL10,CXCL9	2
Inflammatory Response	chemoattraction	chemoattraction of T lymphocytes	8,87E-04	CXCL10,CXCL9	2
Cell-To-Cell Signaling and Interaction	chemoattraction	chemoattraction of T lymphocytes	8,87E-04	CXCL10,CXCL9	2
Cell-mediated Immune Response	chemoattraction	chemoattraction of T lymphocytes	8,87E-04	CXCL10,CXCL9	2
Cellular Movement	chemotaxis	chemotaxis of vascular endothelial cells	8,87E-04	CXCR2,PTGS2	2
Cardiovascular System Development and Function	chemotaxis	chemotaxis of vascular endothelial cells	8,87E-04	CXCR2,PTGS2	2
Hematological System Development and Function	differentiation	differentiation of memory B cells	8,87E-04	IL6,PTGS2	2
Humoral Immune Response	differentiation	differentiation of memory B cells	8,87E-04	IL6,PTGS2	2
Cellular Development	differentiation	differentiation of memory B cells	8,87E-04	IL6,PTGS2	2
Hematopoiesis	differentiation	differentiation of memory B cells	8,87E-04	IL6,PTGS2	2
Infectious Disease	quantity	quantity of Influenza A virus	8,87E-04	IFNG (includes EG:15978),PTGS2	2
Lipid Metabolism	quantity	quantity of fat	8,87E-04	APOB,FABP2	2
Small Molecule Biochemistry	quantity	quantity of fat	8,87E-04	APOB,FABP2	2
Molecular Transport	quantity	quantity of fat	8,87E-04	APOB,FABP2	2
Organismal Functions	thermoregulation	thermoregulation	9,10E-04	IFNG (includes EG:15978),IL6,PPARGC1A,PTGS2	4
Hematological System Development and Function	adhesion	adhesion of neutrophils	9,13E-04	CXCR2,IL6,SELL	3
Immune Cell Trafficking	adhesion	adhesion of neutrophils	9,13E-04	CXCR2,IL6,SELL	3
Inflammatory Response	adhesion	adhesion of neutrophils	9,13E-04	CXCR2,IL6,SELL	3
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of neutrophils	9,13E-04	CXCR2,IL6,SELL	3
Tissue Development	adhesion	adhesion of neutrophils	9,13E-04	CXCR2,IL6,SELL	3
Neurological Disease	demyelination	demyelination of nervous tissue	9,13E-04	CXCL10,IFNG (includes EG:15978),IL6	3
Cardiovascular Disease	hyperlipidemia	hyperlipidemia	9,13E-04	APOB,IL6,PTGS2	3
Metabolic Disease	hyperlipidemia	hyperlipidemia	9,13E-04	APOB,IL6,PTGS2	3
Cellular Development	differentiation	differentiation of epithelial cells	9,30E-04	CSTA,FOXA2,IFNG (includes EG:15978),IL6,PTGS2	5
Inflammatory Response	antibody response	antibody response	9,30E-04	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6,PTPRC	4
Nervous System Development and Function	myelination	myelination	9,30E-04	CXCL10,CXCR2,IFNG (includes EG:15978),PTPRC	4
Cardiovascular System Development and Function	vasculogenesis	vasculogenesis	9,45E-04	ACE2 (includes EG:302668),APOB,CAMP (includes EG:12796),CXCL10,CXCR2,IFNG (includes EG:15978),IL6,PTGS2	8
Organismal Development	vasculogenesis	vasculogenesis	9,45E-04	ACE2 (includes EG:302668),APOB,CAMP (includes EG:12796),CXCL10,CXCR2,IFNG (includes EG:15978),IL6,PTGS2	8
Cell Death and Survival	cytotoxicity	cytotoxicity of T lymphocytes	9,49E-04	IFNG (includes EG:15978),IL6,PTPRC	3
Vitamin and Mineral Metabolism	quantity	quantity of vitamin	9,49E-04	IFNG (includes EG:15978),IL6,PTGS2	3
Gastrointestinal Disease	diarrhea	diarrhea	9,87E-04	CFTR,PTGS2,PTPRC	3
Cell Death and Survival	apoptosis	apoptosis of macrophage cancer cell lines	9,96E-04	IFNG (includes EG:15978),ZC3H12A	2
Cellular Development	growth	arrest in growth of leukemia cell lines	9,96E-04	IFNG (includes EG:15978),IL6	2
Cellular Growth and Proliferation	growth	arrest in growth of leukemia cell lines	9,96E-04	IFNG (includes EG:15978),IL6	2
Gene Expression	binding	binding of Six-inducible element	9,96E-04	IFNG (includes EG:15978),IL6	2
Cell-To-Cell Signaling and Interaction	binding	binding of neuroglia	9,96E-04	CXCR2,IFNG (includes EG:15978)	2
Hematological System Development and Function	development	development of Th17 cells	9,96E-04	IFNG (includes EG:15978),IL6	2
Cell-mediated Immune Response	development	development of Th17 cells	9,96E-04	IFNG (includes EG:15978),IL6	2
Cellular Function and Maintenance	development	development of Th17 cells	9,96E-04	IFNG (includes EG:15978),IL6	2
Lymphoid Tissue Structure and Development	development	development of Th17 cells	9,96E-04	IFNG (includes EG:15978),IL6	2
Cellular Development	development	development of Th17 cells	9,96E-04	IFNG (includes EG:15978),IL6	2
Hematopoiesis	development	development of Th17 cells	9,96E-04	IFNG (includes EG:15978),IL6	2
Organismal Injury and Abnormalities	edema	edema of tissue	9,96E-04	IFNG (includes EG:15978),IL6	2
Cell-To-Cell Signaling and Interaction	gap junctional intercellular communication	gap junctional intercellular communication of cells	9,96E-04	CFTR,IL6	2
Infectious Disease	infection	infection by Hepatitis C virus	9,96E-04	CXCL10,CXCL9	2
Small Molecule Biochemistry	quantity	quantity of nitrite	9,96E-04	IFNG (includes EG:15978),IL6	2
Molecular Transport	quantity	quantity of nitrite	9,96E-04	IFNG (includes EG:15978),IL6	2
Infectious Disease	replication	replication of flavivirus	9,96E-04	CXCL10,IFNG (includes EG:15978)	2
Inflammatory Disease	atopic dermatitis	atopic dermatitis	1,00E-03	CAMP (includes EG:12796),CXCL9,LCE3D,PPARGC1A,PTGS2	5
Dermatological Diseases and Conditions	atopic dermatitis	atopic dermatitis	1,00E-03	CAMP (includes EG:12796),CXCL9,LCE3D,PPARGC1A,PTGS2	5
Immunological Disease	atopic dermatitis	atopic dermatitis	1,00E-03	CAMP (includes EG:12796),CXCL9,LCE3D,PPARGC1A,PTGS2	5
Hematological System Development and Function	differentiation	differentiation of erythroid progenitor cells	1,03E-03	IFNG (includes EG:15978),IL6,PTPRC	3
Cellular Development	differentiation	differentiation of erythroid progenitor cells	1,03E-03	IFNG (includes EG:15978),IL6,PTPRC	3
Hematopoiesis	differentiation	differentiation of erythroid progenitor cells	1,03E-03	IFNG (includes EG:15978),IL6,PTPRC	3
Small Molecule Biochemistry	quantity	quantity of nitric oxide	1,03E-03	ACE2 (includes EG:302668),IFNG (includes EG:15978),IL6	3
Cell Signaling	quantity	quantity of nitric oxide	1,03E-03	ACE2 (includes EG:302668),IFNG (includes EG:15978),IL6	3
Small Molecule Biochemistry	metabolism	metabolism of D-glucose	1,07E-03	FOXA2,IL6,PPARGC1A	3
Carbohydrate Metabolism	metabolism	metabolism of D-glucose	1,07E-03	FOXA2,IL6,PPARGC1A	3
Lymphoid Tissue Structure and Development	morphology	morphology of spleen component	1,07E-03	CXCR2,IFNG (includes EG:15978),MARCO	3
Organ Morphology	morphology	morphology of spleen component	1,07E-03	CXCR2,IFNG (includes EG:15978),MARCO	3
Hematological System Development and Function	development	development of myeloid cells	1,11E-03	IFNG (includes EG:15978),IL6,PTGS2	3
Lymphoid Tissue Structure and Development	development	development of myeloid cells	1,11E-03	IFNG (includes EG:15978),IL6,PTGS2	3
Cellular Development	development	development of myeloid cells	1,11E-03	IFNG (includes EG:15978),IL6,PTGS2	3
Hematopoiesis	development	development of myeloid cells	1,11E-03	IFNG (includes EG:15978),IL6,PTGS2	3
Reproductive System Development and Function	gestation	gestation	1,11E-03	HPGD,IL6,PTGS2	3
Humoral Immune Response	quantity	quantity of IgA	1,11E-03	IFNG (includes EG:15978),IL6,ZC3H12A	3
Protein Synthesis	quantity	quantity of IgA	1,11E-03	IFNG (includes EG:15978),IL6,ZC3H12A	3
Cell Death and Survival	apoptosis	apoptosis of liver cells	1,11E-03	IFNG (includes EG:15978),IL6,PTGS2,PTPRC	4
Cell-To-Cell Signaling and Interaction	attachment	attachment of blood cells	1,11E-03	ACE2 (includes EG:302668),SELL	2
Tissue Development	attachment	attachment of blood cells	1,11E-03	ACE2 (includes EG:302668),SELL	2
Cell Cycle	cell cycle progression	cell cycle progression of liver cells	1,11E-03	IFNG (includes EG:15978),IL6	2
Cell Death and Survival	cell viability	cell viability of sympathetic neuron	1,11E-03	CXCL9,IL6	2
Nervous System Development and Function	cell viability	cell viability of sympathetic neuron	1,11E-03	CXCL9,IL6	2
Neurological Disease	demyelination	demyelination of spinal cord	1,11E-03	CXCL10,IFNG (includes EG:15978)	2
Carbohydrate Metabolism	efflux	efflux of carbohydrate	1,11E-03	IFNG (includes EG:15978),PTGS2	2

Cellular Function and Maintenance	flux	flux of chloride	1,11E-03	CFTR,IFNG (includes EG:15978)	2
Molecular Transport	flux	flux of chloride	1,11E-03	CFTR,IFNG (includes EG:15978)	2
Hematological System Development and Function	proliferation	proliferation of microglia	1,11E-03	IL6,PTPRC	2
Cellular Development	proliferation	proliferation of microglia	1,11E-03	IL6,PTPRC	2
Cellular Growth and Proliferation	proliferation	proliferation of microglia	1,11E-03	IL6,PTPRC	2
Nervous System Development and Function	proliferation	proliferation of microglia	1,11E-03	IL6,PTPRC	2
Inflammatory Disease	multiple sclerosis	multiple sclerosis	1,13E-03	IFNG (includes EG:15978),MS4A1,PTGS2,PTPRC	4
Skeletal and Muscular Disorders	multiple sclerosis	multiple sclerosis	1,13E-03	IFNG (includes EG:15978),MS4A1,PTGS2,PTPRC	4
Neurological Disease	multiple sclerosis	multiple sclerosis	1,13E-03	IFNG (includes EG:15978),MS4A1,PTGS2,PTPRC	4
Hematological System Development and Function	stimulation	stimulation of leukocytes	1,13E-03	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6,PTPRC	4
Cell-To-Cell Signaling and Interaction	stimulation	stimulation of leukocytes	1,13E-03	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6,PTPRC	4
Cellular Growth and Proliferation	stimulation	stimulation of leukocytes	1,13E-03	CAMP (includes EG:12796),IFNG (includes EG:15978),IL6,PTPRC	4
Small Molecule Biochemistry	concentration	concentration of hormone	1,17E-03	FABP2,HPGD,IFNG (includes EG:15978),IL6,PPARGC1A,PTGS2	6
Molecular Transport	concentration	concentration of hormone	1,17E-03	FABP2,HPGD,IFNG (includes EG:15978),IL6,PPARGC1A,PTGS2	6
Endocrine System Development and Function	concentration	concentration of hormone	1,17E-03	FABP2,HPGD,IFNG (includes EG:15978),IL6,PPARGC1A,PTGS2	6
Cellular Movement	cell movement	cell movement of muscle cells	1,18E-03	CXCL10,IFNG (includes EG:15978),IL6,PTGS2	4
Lipid Metabolism	homeostasis	homeostasis of lipid	1,18E-03	APOB,FABP2,PPARGC1A,PTGS2	6
Small Molecule Biochemistry	homeostasis	homeostasis of lipid	1,18E-03	APOB,FABP2,PPARGC1A,PTGS2	4
Skeletal and Muscular Disorders	damage	damage of bone	1,19E-03	IFNG (includes EG:15978),IL6,PTGS2	3
Tissue Morphology	damage	damage of bone	1,19E-03	IFNG (includes EG:15978),IL6,PTGS2	3
Organismal Injury and Abnormalities	damage	damage of bone	1,19E-03	IFNG (includes EG:15978),IL6,PTGS2	3
Cancer	size	size of tumor	1,19E-03	IL6,PPARGC1A,PTGS2	3
Tumor Morphology	size	size of tumor	1,19E-03	IL6,PPARGC1A,PTGS2	3
Tissue Development	morphology	morphology of lung	1,23E-03	CFTR,FOXA2,PPARGC1A,SELL	4
Organ Morphology	morphology	morphology of lung	1,23E-03	CFTR,FOXA2,PPARGC1A,SELL	4
Embryonic Development	morphology	morphology of lung	1,23E-03	CFTR,FOXA2,PPARGC1A,SELL	4
Organismal Development	morphology	morphology of lung	1,23E-03	CFTR,FOXA2,PPARGC1A,SELL	4
Organ Development	morphology	morphology of lung	1,23E-03	CFTR,FOXA2,PPARGC1A,SELL	4
Respiratory System Development and Function	morphology	morphology of lung	1,23E-03	CFTR,FOXA2,PPARGC1A,SELL	4
Cellular Movement	attraction	attraction of neutrophils	1,23E-03	CAMP (includes EG:12796),CXCL10	2
Hematological System Development and Function	attraction	attraction of neutrophils	1,23E-03	CAMP (includes EG:12796),CXCL10	2
Immune Cell Trafficking	attraction	attraction of neutrophils	1,23E-03	CAMP (includes EG:12796),CXCL10	2
Cell-To-Cell Signaling and Interaction	attraction	attraction of neutrophils	1,23E-03	CAMP (includes EG:12796),CXCL10	2
Cellular Function and Maintenance	function	function of keratinocytes	1,23E-03	SELL,TRPV3	2
Hematological System Development and Function	generation	generation of Th17 cells	1,23E-03	IFNG (includes EG:15978),IL6	2
Cellular Development	generation	generation of Th17 cells	1,23E-03	IFNG (includes EG:15978),IL6	2
Cellular Growth and Proliferation	generation	generation of Th17 cells	1,23E-03	IFNG (includes EG:15978),IL6	2
Organismal Injury and Abnormalities	pathogenesis	pathogenesis	1,23E-03	IFNG (includes EG:15978),MS4A1	2
Small Molecule Biochemistry	secretion	secretion of nitric oxide	1,23E-03	IFNG (includes EG:15978),PTPRC	2
Molecular Transport	secretion	secretion of nitric oxide	1,23E-03	IFNG (includes EG:15978),PTPRC	2
Cell Signaling	secretion	secretion of nitric oxide	1,23E-03	IFNG (includes EG:15978),PTPRC	2
Humoral Immune Response	quantity	quantity of IgG3	1,23E-03	IFNG (includes EG:15978),PTGS2,ZC3H12A	3
Protein Synthesis	quantity	quantity of IgG3	1,23E-03	IFNG (includes EG:15978),PTGS2,ZC3H12A	3
Cell-To-Cell Signaling and Interaction	signaling	signaling of cells	1,25E-03	CAMP (includes EG:12796),CXCL10,CXCL9,IFNG (includes EG:15978),IL6	5
Cell Death and Survival	apoptosis	apoptosis of lung cancer cell lines	1,25E-03	CAMP (includes EG:12796),FOXA2,IL6,PTGS2	4
Cardiovascular System Development and Function	proliferation	proliferation of endothelial cells	1,27E-03	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),IL6,PTGS2	5
Tissue Development	proliferation	proliferation of endothelial cells	1,27E-03	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),IL6,PTGS2	5
Cellular Development	proliferation	proliferation of endothelial cells	1,27E-03	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),IL6,PTGS2	5
Organismal Development	proliferation	proliferation of endothelial cells	1,27E-03	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),IL6,PTGS2	5
Cellular Growth and Proliferation	proliferation	proliferation of endothelial cells	1,27E-03	CAMP (includes EG:12796),CXCL10,IFNG (includes EG:15978),IL6,PTGS2	5
Lipid Metabolism	synthesis	synthesis of sterol	1,28E-03	APOB,CFTR,IFNG (includes EG:15978)	3
Small Molecule Biochemistry	synthesis	synthesis of sterol	1,28E-03	APOB,CFTR,IFNG (includes EG:15978)	3
Vitamin and Mineral Metabolism	synthesis	synthesis of sterol	1,28E-03	APOB,CFTR,IFNG (includes EG:15978)	3
Cellular Movement	transmigration	transmigration of phagocytes	1,28E-03	CXCR2,IFNG (includes EG:15978),IL6	3
Hematological System Development and Function	transmigration	transmigration of phagocytes	1,28E-03	CXCR2,IFNG (includes EG:15978),IL6	3
Immune Cell Trafficking	transmigration	transmigration of phagocytes	1,28E-03	CXCR2,IFNG (includes EG:15978),IL6	3
Inflammatory Response	transmigration	transmigration of phagocytes	1,28E-03	CXCR2,IFNG (includes EG:15978),IL6	3
Inflammatory Disease	Crohn's disease	Crohn's disease	1,28E-03	CAMP (includes EG:12796),HPGD,IL6,PTGS2	4
Gastrointestinal Disease	Crohn's disease	Crohn's disease	1,28E-03	CAMP (includes EG:12796),HPGD,IL6,PTGS2	4
Lipid Metabolism	concentration	concentration of cholesterol	1,30E-03	APOB,FABP2,IFNG (includes EG:15978),IL6,PTGS2	5
Small Molecule Biochemistry	concentration	concentration of cholesterol	1,30E-03	APOB,FABP2,IFNG (includes EG:15978),IL6,PTGS2	5
Molecular Transport	concentration	concentration of cholesterol	1,30E-03	APOB,FABP2,IFNG (includes EG:15978),IL6,PTGS2	5
Endocrine System Disorders	non-insulin-dependent diabetes mellitus	non-insulin-dependent diabetes mellitus	1,30E-03	APOB,FABP2,FOXA2,IL6,PTGS2	5
Metabolic Disease	non-insulin-dependent diabetes mellitus	non-insulin-dependent diabetes mellitus	1,30E-03	APOB,FABP2,FOXA2,IL6,PTGS2	5
Gastrointestinal Disease	non-insulin-dependent diabetes mellitus	non-insulin-dependent diabetes mellitus	1,30E-03	APOB,FABP2,FOXA2,IL6,PTGS2	5
Nutritional Disease	weight gain	weight gain	1,32E-03	IFNG (includes EG:15978),IL6,PPARGC1A,PTGS2,SELL	5
Inflammatory Response	cell-mediated response	cell-mediated response	1,33E-03	CXCL10,IFNG (includes EG:15978),IL6,SELL	4
Cell Morphology	morphology	morphology of tumor cell lines	1,33E-03	FABP2,IFNG (includes EG:15978),IL6,MARCO	4
Hematological System Development and Function	adhesion	adhesion of hematopoietic progenitor cells	1,36E-03	CXCL10,CXCL9	2
Immune Cell Trafficking	adhesion	adhesion of hematopoietic progenitor cells	1,36E-03	CXCL10,CXCL9	2
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of hematopoietic progenitor cells	1,36E-03	CXCL10,CXCL9	2
Tissue Development	adhesion	adhesion of hematopoietic progenitor cells	1,36E-03	CXCL10,CXCL9	2
Hematopoiesis	adhesion	adhesion of hematopoietic progenitor cells	1,36E-03	CXCL10,CXCL9	2
Cell Death and Survival	apoptosis	apoptosis of myeloid leukemia cells	1,36E-03	IFNG (includes EG:15978),IL6	2
Tumor Morphology	apoptosis	apoptosis of myeloid leukemia cells	1,36E-03	IFNG (includes EG:15978),IL6	2
Lipid Metabolism	concentration	concentration of 1-alpha, 25-dihydroxy vitamin D3	1,36E-03	IFNG (includes EG:15978),PTGS2	2
Small Molecule Biochemistry	concentration	concentration of 1-alpha, 25-dihydroxy vitamin D3	1,36E-03	IFNG (includes EG:15978),PTGS2	2
Molecular Transport	concentration	concentration of 1-alpha, 25-dihydroxy vitamin D3	1,36E-03	IFNG (includes EG:15978),PTGS2	2
Vitamin and Mineral Metabolism	concentration	concentration of 1-alpha, 25-dihydroxy vitamin D3	1,36E-03	IFNG (includes EG:15978),PTGS2	2
Drug Metabolism	concentration	concentration of 1-alpha, 25-dihydroxy vitamin D3	1,36E-03	IFNG (includes EG:15978),PTGS2	2
Hematological System Development and Function	differentiation	differentiation of effector T lymphocytes	1,36E-03	IFNG (includes EG:15978),IL6	2
Cell-mediated Immune Response	differentiation	differentiation of effector T lymphocytes	1,36E-03	IFNG (includes EG:15978),IL6	2
Cellular Function and Maintenance	differentiation	differentiation of effector T lymphocytes	1,36E-03	IFNG (includes EG:15978),IL6	2
Lymphoid Tissue Structure and Development	differentiation	differentiation of effector T lymphocytes	1,36E-03	IFNG (includes EG:15978),IL6	2
Cellular Development	differentiation	differentiation of effector T lymphocytes	1,36E-03	IFNG (includes EG:15978),IL6	2
Hematopoiesis	differentiation	differentiation of effector T lymphocytes	1,36E-03	IFNG (includes EG:15978),IL6	2
Respiratory Disease	eosinophilia	eosinophilia of airway	1,36E-03	CXCL9,IFNG (includes EG:15978)	2
Hematological Disease	eosinophilia	eosinophilia of airway	1,36E-03	CXCL9,IFNG (includes EG:15978)	2
Immunological Disease	eosinophilia	eosinophilia of airway	1,36E-03	CXCL9,IFNG (includes EG:15978)	2
Hematological System Development and Function	generation	generation of regulatory T lymphocytes	1,36E-03	IFNG (includes EG:15978),IL6	2

Tissue Development	generation	generation of regulatory T lymphocytes	1,36E-03	IFNG (includes EG:15978),IL6	2
Cellular Growth and Proliferation	generation	generation of regulatory T lymphocytes	1,36E-03	IFNG (includes EG:15978),IL6	2
Lipid Metabolism	metabolism	metabolism of arachidonic acid	1,36E-03	CFTR,PTGS2	2
Small Molecule Biochemistry	metabolism	metabolism of arachidonic acid	1,36E-03	CFTR,PTGS2	2
Cellular Growth and Proliferation	proliferation	proliferation of duct cells	1,36E-03	IFNG (includes EG:15978),IL6	2
Infectious Disease	replication	replication of hepatitis B virus	1,36E-03	IFNG (includes EG:15978),PPARGC1A	2
Cellular Movement	translocation	translocation of cells	1,36E-03	CXCL9,IFNG (includes EG:15978)	2
Cell-To-Cell Signaling and Interaction	detachment	detachment of cells	1,37E-03	CXCL10,PTPRC,SELL	3
Tissue Development	detachment	detachment of cells	1,37E-03	CXCL10,PTPRC,SELL	3
Cardiovascular Disease	hypertrophy	hypertrophy of heart ventricle	1,37E-03	IL6,PPARGC1A,PTGS2	3
Developmental Disorder	hypertrophy	hypertrophy of heart ventricle	1,37E-03	IL6,PPARGC1A,PTGS2	3
Cell Death and Survival	cell viability	cell viability of mononuclear leukocytes	1,39E-03	APOB,IFNG (includes EG:15978),IL6,PTPRC	4
Infectious Disease	endotoxin shock response	endotoxin shock response	1,42E-03	IFNG (includes EG:15978),IL6,PTGS2	3
Hematological Disease	endotoxin shock response	endotoxin shock response	1,42E-03	IFNG (includes EG:15978),IL6,PTGS2	3
Organismal Injury and Abnormalities	endotoxin shock response	endotoxin shock response	1,42E-03	IFNG (includes EG:15978),IL6,PTGS2	3
Hematological System Development and Function	proliferation	proliferation of antigen presenting cells	1,42E-03	IFNG (includes EG:15978),IL6,PTPRC	3
Cellular Development	proliferation	proliferation of antigen presenting cells	1,42E-03	IFNG (includes EG:15978),IL6,PTPRC	3
Cellular Growth and Proliferation	proliferation	proliferation of antigen presenting cells	1,42E-03	IFNG (includes EG:15978),IL6,PTPRC	3
Cell Death and Survival	cell death	cell death of dermal cells	1,47E-03	CAMP (includes EG:12796),IFNG (includes EG:15978),PTGS2	3
Cellular Movement	migration	migration of vascular smooth muscle cells	1,47E-03	IFNG (includes EG:15978),IL6,PTGS2	3
Skeletal and Muscular System Development and Function	migration	migration of vascular smooth muscle cells	1,47E-03	IFNG (includes EG:15978),IL6,PTGS2	3
Lymphoid Tissue Structure and Development	proliferation	proliferation of splenocytes	1,47E-03	CXCL10,IFNG (includes EG:15978),IL6	3
Cellular Development	proliferation	proliferation of splenocytes	1,47E-03	CXCL10,IFNG (includes EG:15978),IL6	3
Cellular Growth and Proliferation	proliferation	proliferation of splenocytes	1,47E-03	CXCL10,IFNG (includes EG:15978),IL6	3
Cellular Development	proliferation	proliferation of liver cells	1,47E-03	CXCR2,IFNG (includes EG:15978),IL6,PTGS2	4
Cellular Growth and Proliferation	proliferation	proliferation of liver cells	1,47E-03	CXCR2,IFNG (includes EG:15978),IL6,PTGS2	4
Hepatic System Development and Function	proliferation	proliferation of liver cells	1,47E-03	CXCR2,IFNG (includes EG:15978),IL6,PTGS2	4
Reproductive System Disease	endometriosis	endometriosis	1,47E-03	CXCL10,CXCL9,CXCR2,IL6,PTGS2,UGT2B7	6
Inflammatory Disease	allergic contact dermatitis	allergic contact dermatitis	1,49E-03	CAMP (includes EG:12796),IFNG (includes EG:15978)	2
Dermatological Diseases and Conditions	allergic contact dermatitis	allergic contact dermatitis	1,49E-03	CAMP (includes EG:12796),IFNG (includes EG:15978)	2
Immunological Disease	allergic contact dermatitis	allergic contact dermatitis	1,49E-03	CAMP (includes EG:12796),IFNG (includes EG:15978)	2
Cell-To-Cell Signaling and Interaction	binding	binding of endothelial cell lines	1,49E-03	IL6,SELL	2
Cardiovascular System Development and Function	binding	binding of endothelial cell lines	1,49E-03	IL6,SELL	2
Tissue Development	generation	generation of dendritic cells	1,49E-03	IFNG (includes EG:15978),IL6	2
Cellular Growth and Proliferation	generation	generation of dendritic cells	1,49E-03	IFNG (includes EG:15978),IL6	2
Inflammatory Response	inflammation	inflammation of stomach	1,49E-03	IFNG (includes EG:15978),PTGS2	2
Hematological System Development and Function	maturation	maturation of helper T lymphocytes	1,49E-03	IFNG (includes EG:15978),PTGS2	2
Cellular Development	maturation	maturation of helper T lymphocytes	1,49E-03	IFNG (includes EG:15978),PTGS2	2
Hematopoiesis	maturation	maturation of helper T lymphocytes	1,49E-03	IFNG (includes EG:15978),PTGS2	2

Supplementary Table 5 : Primers sequences for qRT-PCR and qPCR analysis

Mouse gene name	Forward primer (5'-3')	Reverse primer (5'-3')
Actb	GAATGGGTCAGAAGGACTCCTATG	CCATGTCGTCCCAGTTGGTAA
Cldn5	GGGCCGTCGGGTGAGCATTG	TCGTCTGCGCCGTCACGATG
Il6	ACACATGTTCTCTGGGAAATCGT	AAGTGCATCATCGTTGTTTCATACA
Il10	ATACTGCTAACCGACTCCTTAATG	ACCCAGGGAATTCAAATGCTC
Il17a	ACCGCAATGAAGACCCTGATA	GCACTGAGCTTCCCAGAT
Il17f	ATTCCAGAACCGCTCCAGTTC	GGTCTCGAGTGATGTTGTAATCC
Il22	CATCGTCAACCGCACCTTT	GCCGGACGTCTGTGTTGTTA
Mmp13	TTTATTGTTGCTGCCCATGA	TTTTGGGATGCTTAGGGTTG
Ptgs2	GGGCCCTTCCTCCCCTAGCA	CCATGGCCCAGTCCTCGGGT
Reg3b	ATGCTGCTCTCCTGCCTGATG	CTAATGCGTGCGGAGGGTATATTC
Reg3g	CTGTGGTACCCTGTCAAGAGC	GGCCTTGAATTTGCAGACAT
Spp1	TCCCCAACGGCCGAGGTGAT	GCTCAGAAGCTGGGCAACAGGG
Tnfa	GACCCTCACACTCAGATCATCTTCT	CCACTTGGTGGTTTGGTACGA

Bacterial name	Forward primer (5'-3')	Reverse primer (5'-3')
Bacteroides	GGTTCTGAGAGGAAGGTCCC	GCTGCCTCCCGTAGGAGT