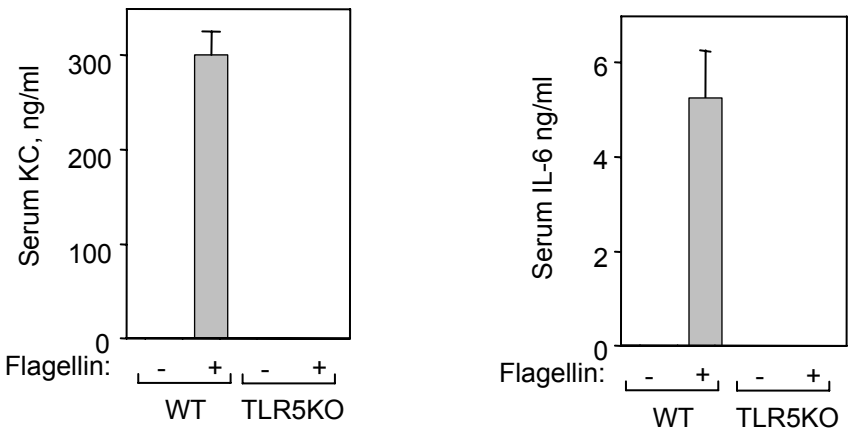
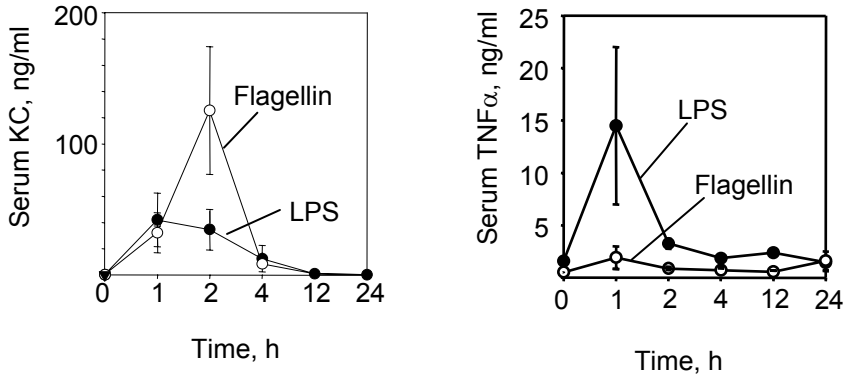
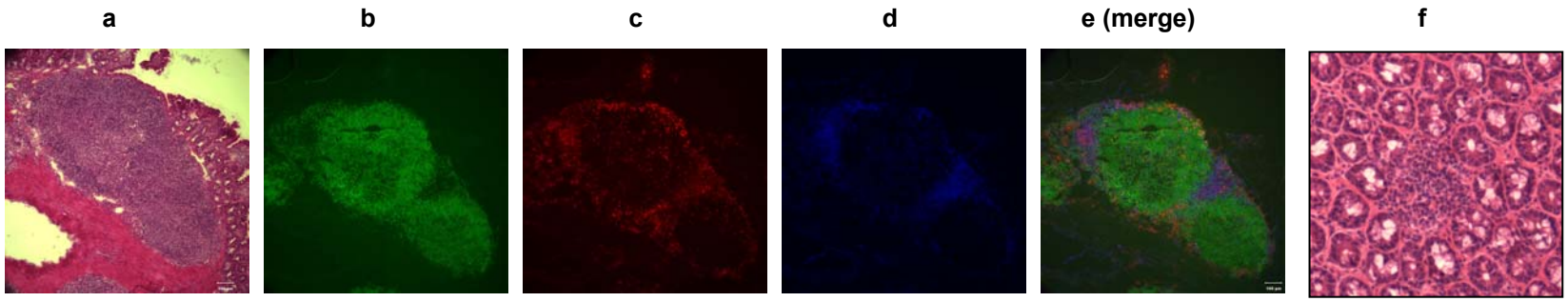


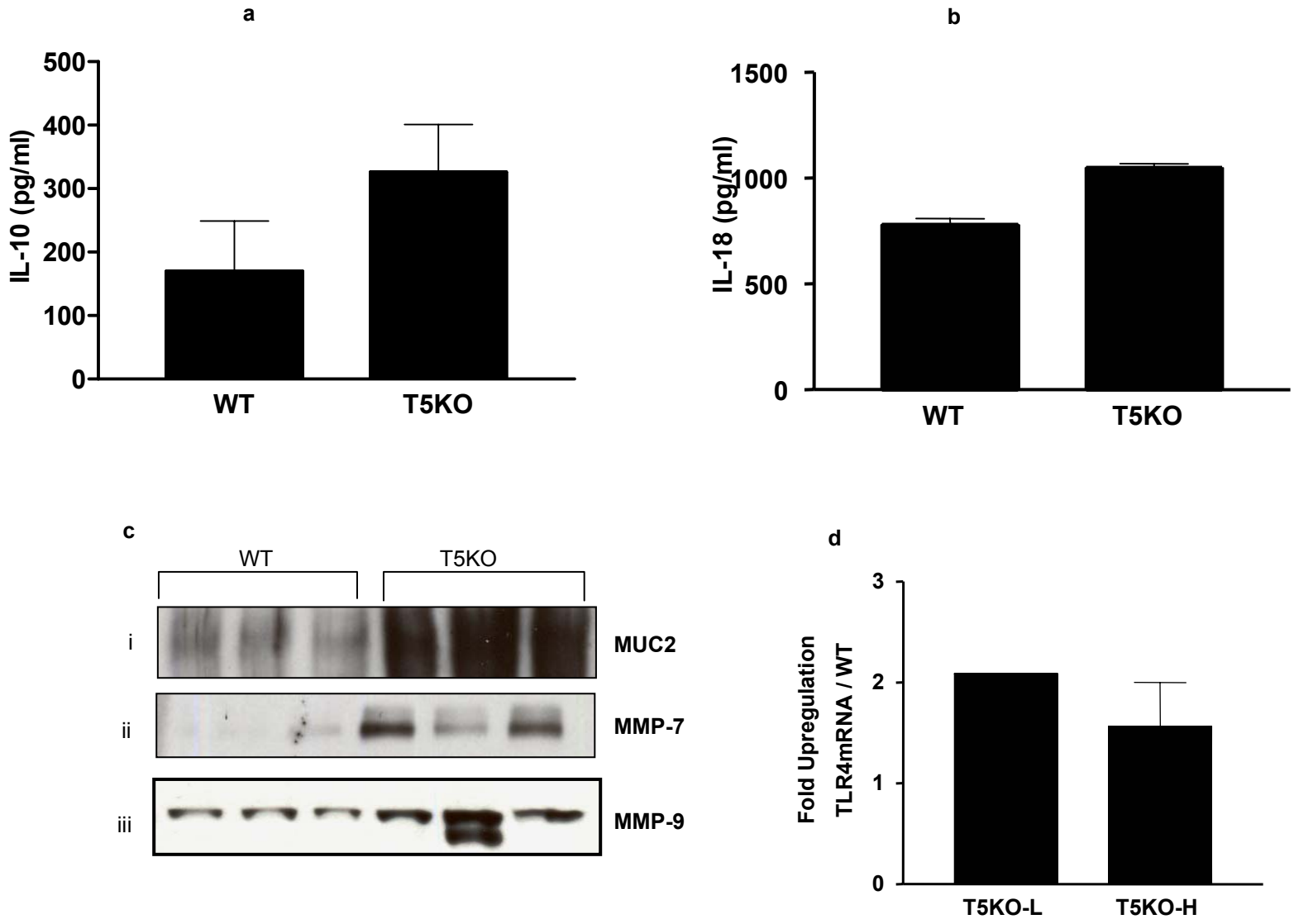
Supplementary figure 1



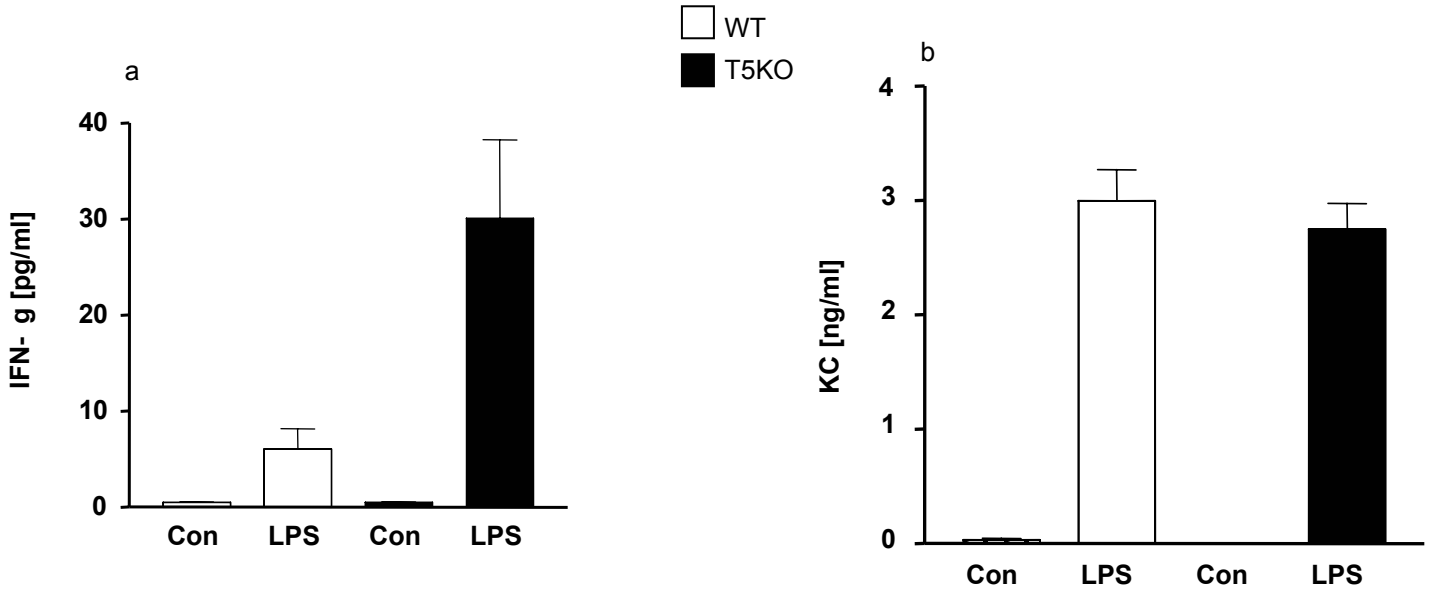
Supplementary figure 2



Supplementary figure 3



Supplementary figure 4



Supplementary figure 5

Gene Name	GenBank #	T5KO-L/WT	T5KO-H/WT
1. Antimicrobials			
Regenerating islet-derived 3 gamma	BC046602	1.1	34.0
Secretory leukocyte protease inhibitor	CA462388	1.8	33.9
Nitric oxide synthase 2, inducible, macrophage	BC062378	0.7	27.3
Indoleamine-pyrrole 2,3 dioxygenase	AK033783	0.6	12.4
Mucin 1, transmembrane	BC005441	2.4	11.3
Lipocalin 2	BG917714	1.3	10.4
Small proline rich protein 2K	AY158995	2.9	6.4
Lipocalin 13	AW049121	2.0	4.8
Mucolipin 3	AK033008	2.0	4.3
Peptidoglycan recognition protein 4	AY518699	1.2	4.2
Defensin related cryptdin, related sequence 7	AA871663	1.9	4.2
Lipocalin 3	D38580	2.9	4.1
Defensin beta 34	AJ578469	2.0	4.1
Lysozyme-like 1	CN837613	1.5	3.5
Lysozyme	BF118738	1.8	3.5
Lipidosin	AB050554	1.9	3.2
Perforin 1 (pore forming protein)	NM_011073	1.8	3.0
Lipocalin 10	AF435737	9.0	2.9
Defensin beta 11	AJ437646	4.5	2.8
Defensin beta 41	AK020304	1.4	2.8
Defensin beta 12	AB089182	2.1	2.8
Lipocalin 6	AK033743	1.8	2.7
C-reactive protein, petaxin related	NM_007768	1.7	2.6
Mucin 5, subtypes A and C, tracheobronchial/gastric	L42292	1.8	2.6
Defensin beta 50	AY387658	1.4	2.5
Peptidoglycan recognition protein 1	CB590729	2.5	2.5
Mucin 20	AB098732	2.0	2.3
Defensin beta 19	BU938902	0.3	2.3
Defensin related cryptdin 4	AV067066	1.0	2.2
Defensin related cryptdin 5	AA871410	2.2	2.2
Defensin beta 2	AJ011800	1.5	2.1
Hepcidin antimicrobial peptide	CA458552	1.6	2.1
Lipocalin 4	AK042434	0.9	2.0
Proline-rich polypeptide 6	AK086284	1.5	1.9
Lipocalin 12	AY299493	0.5	1.8
Peptidoglycan recognition protein 2	AB084140	0.7	1.8
Defensin beta 10	AJ437645	1.4	1.8
2. Cytokines/Chemokines/Growth Factors			
S100 calcium binding protein A9 (calgranulin B)	AA755422	2.4	110.3
S100 calcium binding protein A8 (calgranulin A)	BQ031570	1.8	88.0
S100 calcium binding protein G	CA481801	29.0	44.2
Transforming growth factor beta 1 induced transcript 1	AK087114	37.8	27.4
Interleukin 1 beta	NM_008361	0.6	9.2
Tumor necrosis factor	X02611	1.4	9.1
Interleukin 10	M37897	1.7	7.8

S100 calcium binding protein A14	BC025607	3.3	6.2
Interleukin 12b	NM_008352	3.1	6.1
Interleukin 16	BC058709	2.6	3.9
Fibroblast growth factor 22	AK008922	1.1	3.7
Fibroblast growth factor 7	AK033934	7.2	3.6
Transforming growth factor, beta induced	AK084431	4.2	3.6
Macrophage migration inhibitory factor	CA469091	1.3	3.5
Colony stimulating factor 2 (granulocyte-macrophage)	X02333	1.8	3.2
Interleukin 27	AY099297	0.9	2.9
Interleukin 17F	AY380822	1.3	2.9
Leukocyte cell derived chemotaxin 1	NM_010701	1.8	2.8
Colony stimulating factor 1 (macrophage)	M21952	3.2	2.8
Interleukin 24	AF235006	1.4	2.8
Fibroblast growth factor 2	AK076764	1.5	2.7
Interleukin 19	NM_001009940	2.2	2.7
Interleukin 2	XM_109393	1.7	2.6
Interferon gamma	AK089852	1.4	2.6
Interleukin 17C	AF458061	1.5	2.5
Endothelial cell growth factor 1 (platelet-derived)	AB060274	2.4	2.3
Leukemia inhibitory factor	NM_008501	1.5	2.3
Interleukin 5	X06270	1.7	2.3
Fibroblast growth factor 22	AK008922	1.5	2.3
Lymphotoxin B	BC064062	1.3	2.2
Colony stimulating factor 3 (granulocyte)	M13926	1.1	2.2
Interleukin 20	AK078698	2.0	2.2
Interleukin 11	U03421	2.1	2.1
Interleukin 4 induced 1	AY157538	1.6	2.1
Transforming growth factor alpha	U65016	2.0	2.1
Interleukin-23		1.1	2.1
Transforming growth factor, beta 2	X57413	2.3	2.0
Interleukin 17B	BE307772	1.4	2.0
High mobility group box 2	BF124736	0.3	2.0
Leukocyte cell-derived chemotaxin 2	AI385799	1.7	1.8
Interleukin 17	AK040420	2.1	1.8
Platelet derived growth factor, alpha	AK017169	2.0	1.8
Interleukin 12a	NM_008351	1.2	1.8
Interleukin 1 alpha	X01450	1.0	1.7

3. Cytokine Receptors

Suppressor of cytokine signaling 3	BC052031	2.9	36.6
Interleukin 18 binding protein	AF110802	3.0	23.5
Interleukin 1 receptor, type II	AK089728	4.7	15.4
Interleukin 17 receptor E	AK046302	20.2	10.7
Colony stimulating factor 3 receptor (granulocyte)	M58288	3.9	6.9
Oogenesin 2	BC052839	6.1	5.6
Interleukin 10 receptor, alpha	L12120	6.7	4.7
Suppressor of cytokine signaling 1	NM_009896	1.4	4.3
Interleukin 13 receptor, alpha 2	AK089687	1.3	4.0
Interleukin 7 receptor	NM_008372	2.4	4.0
Interleukin 2 receptor, gamma chain	X75337	2.1	3.9
Interleukin 10-related T cell-derived inducible factor beta	AJ249492	1.9	3.3

Interleukin 13 receptor, alpha 1	BC052425	3.7	3.2
Interleukin 27 receptor, alpha	AK040457	1.9	3.1
Interleukin 8 receptor, beta	BC051677	1.0	3.1
Interleukin 4 receptor, alpha	M27960	1.2	3.0
Lymphotoxin B receptor	U29173	1.9	3.0
Interleukin 5 receptor, alpha	D90205	1.4	2.9
Interleukin 1 family, member 7	AY071844	1.5	2.8
Colony stimulating factor 1 receptor	BC050024	3.0	2.7
Interleukin 17 receptor D	AF459444	1.8	2.6
Interleukin 15 receptor, alpha chain	AK041949	2.0	2.6
Interleukin 18 receptor 1	U43673	1.2	2.6
Interleukin 2 receptor, alpha chain	AK088594	0.7	2.5
Oncostatin M receptor	AF058805	1.0	2.5
Interleukin 28 receptor alpha	NM_174851	2.0	2.4
Interleukin 23 receptor	AF461423	0.9	2.4
Interleukin 1 family, member 9	AK081783	2.1	2.3
Interleukin 22 receptor, alpha 2	NM_178258	1.5	2.3
Interleukin 18 receptor accessory protein	AF077347	1.7	2.2
Interleukin 9 receptor	M84746	4.6	1.7

4. Chemokine Receptors/Ligands

Chemokine (C-X-C motif) ligand 5	AK044397	2.8	30.9
Chemokine (C-X-C motif) receptor 6	AF305709	2.6	7.3
Chemokine (C-X-C motif) ligand 2	X53798	1.4	7.2
Chemokine (C-C motif) ligand 2	CB571537	1.2	5.8
Chemokine (C-X-C motif) receptor 4	D87747	5.6	5.7
Chemokine (C-X-C motif) ligand 16	AK029988	2.1	5.0
Chemokine (C-C motif) ligand 19	BE864988	2.5	4.4
Chemokine (C-C motif) ligand 5	AI020884	0.9	4.1
Chemokine (C-C motif) ligand 28	BC040510	1.6	4.0
Chemokine (C-C motif) ligand 22	AF052505	2.3	3.9
Chemokine (C-C motif) receptor 5	D83648	1.0	3.8
Chemokine (C-C motif) receptor 4	U15208	2.9	3.7
Chemokine (C-X-C motif) ligand 10	BC057150	1.3	3.3
Chemokine (C-C motif) receptor 2	U56819	0.7	3.0
Chemokine (C-C motif) receptor 7	L31580	1.6	2.9
Chemokine-like receptor 1	U79525	1.7	2.7
Chemokine (C motif) ligand 1	AI323655	1.2	2.6
Chemokine (C-C motif) ligand 7	BF142314	1.1	2.6
Chemokine (C-X-C motif) ligand 11	AK050012	1.5	2.4
Chemokine (C-X3-C) receptor 1	AK045634	1.1	2.3
Chemokine (C-X-C motif) ligand 13	BC012965	2.3	1.9

5. Transcription Factors

Signal transducer and activator of transcription 1	AK082706	1.6	4.1
Signal transducer and activator of transcription 6	L47650	2.1	3.5
Signal transducer and activator of transcription 2	AF206162	1.8	3.0
Nuclear factor of activated T-cells, cytoplasmic, calcineurin-	U36575	2.1	3.0
Signal transducer and activator of transcription 4	U09351	0.8	2.4
Interferon regulatory factor 1	BC003821	0.8	2.3

N-myc (and STAT) interactor	AF019249	2.2	2.3
Interferon regulatory factor 6	BC008515	2.7	2.2
Nuclear factor of activated T-cells, cytoplasmic, calcineurin-	U36575	1.7	2.1
Interferon regulatory factor 5	AF028725	1.3	2.0
Interferon regulatory factor 7	AK004349	1.5	1.9
Protein inhibitor of activated STAT, 4	AF109174	1.0	1.9
Signal transducer and activator of transcription 3	AK079406	1.6	1.8

6. Cluster of Differentiation Antigens

Cd63 antigen	BF144115	14.7	18.8
CD226 antigen	AK036455	4.5	10.2
CD5 antigen	NM_007650	2.0	5.8
CD86 antigen	AK079513	2.3	3.6
CD69 antigen	AK089801	1.6	3.2
CD68 antigen	X68273	1.1	3.0
CD4 antigen	X04836	1.3	3.0
CD3 antigen, gamma polypeptide	AI573386	1.2	2.9
CD79A antigen (immunoglobulin-associated alpha)	BC027633	1.8	2.8
CD44 antigen	BC025635	1.7	2.7
CD2 antigen	BC053731	0.3	2.7
CD38 antigen	AK038439	0.9	2.6
CD3 antigen, delta polypeptide	AI326617	3.7	2.6
CD22 antigen	L02844	1.9	2.6
CD14 antigen	BF120684	1.2	2.5
CD79B antigen	J03857	2.6	2.4
CD160 antigen	NM_018767	1.5	2.4
CD7 antigen	BC024376	1.6	2.4
CD28 antigen	AK030812	1.2	2.4
CD72 antigen	BC003824	1.7	2.3
CD209a antigen	AY049062	1.3	2.2
CD33 antigen	S71403	1.1	2.2

7. Matrix Metalloproteases

Matrix metalloproteinase 10	Y13185	1.3	9.7
Matrix metalloproteinase 13	X66473	3.7	8.1
Matrix metalloproteinase 12	AK050200	1.1	5.3
Matrix metalloproteinase 7	L36244	1.3	5.0
Matrix metalloproteinase 21	AY124569	1.5	3.3
Matrix metalloproteinase 3	X63162	1.2	2.9
Matrix metalloproteinase 16	AK048543	1.5	2.5
Matrix metalloproteinase 9	BC046991	1.7	2.4
Matrix metalloproteinase 25	BC059059	1.3	2.3
Tissue inhibitor of metalloproteinase 1	CF584850	0.7	2.0
Matrix metalloproteinase 23	AF085742	2.3	1.9
Matrix metalloproteinase 28 (epilysin)	AK051258	0.5	1.8

8. Acute Phase Proteins

Haptoglobin	BF236204	5.9	25.9
Serum amyloid A 2	CB949541	0.3	4.9
Serum amyloid A 1	BC052495	2.5	2.9

Serum amyloid A 4	NM_011316	1.7	2.7
Alpha-2-macroglobulin	AY185125	1.4	2.6
Hemopexin	BF531976	1.6	2.1

9. Antioxidant Enzymes

Glutathione reductase 1	BC056357	0.9	8.2
Glutathione peroxidase 3	BF785857	9.1	5.9
Glutathione S-transferase, alpha 2 (Yc2)	W29265	2.2	3.8
Glutathione peroxidase 7	BI413982	3.2	3.3
Glutathione S-transferase omega 2	AK075753	2.1	3.1
Superoxide dismutase 3, extracellular	U38261	1.7	2.7
Glutathione S-transferase, alpha 1 (Ya)	AI323690	3.1	2.7
Glutathione peroxidase 4	CA462249	1.6	2.4
Glutathione S-transferase kappa 1	AI573713	2.0	1.7

10. Iron Metabolism

Haptoglobin	BF236204	5.9	25.9
Lactotransferrin	AK036491	0.7	13.9
Transferrin	BC012313	2.6	3.7
Hemogen	AF269248	0.8	3.3
Transferrin receptor	BC054522	1.1	2.5
Hephaestin	AF082567	1.5	2.3
Hepcidin antimicrobial peptide	CA458552	1.6	2.1

11. Hematopoietic Development

Hemogen	AF269248	0.8	3.3
Thrombopoietin	AK047512	2.2	3.3
Erythropoietin	NM_007942	1.5	2.6
Hematopoietic cell signal transducer	BG869011	1.7	2.4
Hemopexin	BF531976	1.6	2.1

12. Water and Electrolyte Metabolism

Chloride channel calcium activated 4	AY008277	60.4	300.8
Chloride channel 1	AK036735	3.8	4.1
Aquaporin 6	AK082699	1.8	3.5
Chloride channel calcium activated 6	AK033591	0.5	2.9
Aquaporin 7	NM_007473	3.7	2.8
Aquaporin 5	NM_009701	1.6	2.7
Adenosine A2b receptor	AK084321	2.3	2.4

13. Xenobiotic Metabolism

Cytochrome P450, family 11, subfamily a, polypeptide 1	BC068264	1.8	4.2
Cytochrome P450, family 2, subfamily c, polypeptide 40	BC019468	5.7	4.0
Cytochrome P450, family 19, subfamily a, polypeptide 1	D00659	2.7	3.3
Cytochrome P450, family 24, subfamily a, polypeptide 1	D89669	1.4	3.3
Cytochrome P450, family 4, subfamily f, polypeptide 15	AF233645	1.8	3.1
Cytochrome P450, family 4, subfamily f, polypeptide 16	BC026539	1.7	2.9
Cytochrome P450, family 51	AK028815	1.4	2.8

Cytochrome P450, family 4, subfamily x, polypeptide 1	AK038526	1.7	2.4
Cytochrome P450, family 2, subfamily j, polypeptide 13	BC016446	1.3	2.4

14. Antibacterial Enzymes

Nitric oxide synthase 2, inducible, macrophage	BC062378	0.7	27.3
Indoleamine-pyrrole 2,3 dioxygenase	AK033783	0.6	12.4
Eosinophil peroxidase	D78353	1.3	3.0
Myeloperoxidase	X15313	1.6	1.8

15. Gut Hormones/Receptors

Somatostatin receptor 2	X68951	2.2	8.9
Pancreasin	AK080281	1.2	5.0
Insulin-like growth factor binding protein 4	AK081766	1.9	4.7
Gastrin	CF584086	3.5	4.6
Insulin II	AW489963	1.3	4.5
Vasoactive intestinal peptide receptor 1	AK052465	2.8	4.3
Neuropeptide Y	BQ044605	7.3	4.2
Pancreatitis-associated protein	CF583601	0.0	4.2
Insulin I	BP774304	2.4	3.8
Vasoactive intestinal peptide receptor 2	D28132	3.5	3.5
Somatostatin receptor 3	NM_009218	1.1	3.2
Insulin-like growth factor binding protein 3	BC058261	5.2	2.9
Insulin receptor-related receptor	AB007135	3.2	2.9
Insulinoma-associated 2	NM_020287	1.4	2.5
Somatostatin receptor 4	AK051189	1.3	2.4
Insulin receptor substrate 4	BC060235	2.9	2.4
Insulin-like growth factor binding protein 5	L12447	1.9	2.4
Insulin induced gene 1	AK088380	1.1	2.4
Gastric intrinsic factor	AK078933	1.7	2.3
Neuropeptide Y receptor Y5	AB001346	1.7	2.3
Gastrokine 1	AK008622	1.9	2.3
Glucagon-like peptide 1 receptor	AJ001692	1.9	2.2
Islet amyloid polypeptide	BF715273	0.5	2.2
Cholecystokinin	CA496838	2.0	2.0
Insulin-like growth factor 1	AK050118	1.8	1.8
Insulin-like growth factor binding protein 4	AK081766	1.0	1.7
Pancreatic polypeptide	BP774090	3.1	1.6

16. Proteases

Cathepsin K	BC046320	19.8	10.2
Serine (or cysteine) proteinase inhibitor, clade A, member 6	BC013632	3.7	7.3
Protease, serine, 22	BC055854	3.2	7.1
Serine (or cysteine) proteinase inhibitor, clade B, member 9d	AK028382	4.3	5.4
Calpain 1	NM_007600	3.2	4.9
Extracellular proteinase inhibitor	AI385534	1.1	4.5
Protease, serine, 2	CF581430	1.9	4.3
Cathepsin 7	BC050198	2.9	4.0
Mannan-binding lectin serine protease 1	D16492	2.9	3.9
Mast cell protease 1	NM_008570	1.4	3.5
Calpain 12	AJ289243	1.7	3.4

Cathepsin 6	AY014781	1.6	3.1
Mast cell protease 2	AA711602	1.9	3.0
Carboxypeptidase A4	BC061206	2.3	3.0
Protease, serine, 12 neurotrypsin (motopsin)	D89871	0.8	3.0
Elastase 3B, pancreatic	BQ230771	1.3	2.7
Cathepsin Z	BF782474	1.2	2.6
Calpain 8	AB050202	2.0	2.6
Elastase 2	AA882455	1.8	2.4

17. Inhibitors of Proteases

Secretory leukocyte protease inhibitor	CA462388	1.7	33.8
Serine (or cysteine) proteinase inhibitor, clade A, member 3N	BC013651	1.5	12.7
Serine (or cysteine) proteinase inhibitor, clade A, member 3G	AY862185	1.6	10.3
Serine (or cysteine) proteinase inhibitor, clade B, member 9d	AK028382	4.3	5.4
Extracellular proteinase inhibitor	AI385534	1.1	4.5

18. Apoptosis (Pro and Anti)

Caspase 7	Y13088	6.2	9.7
DEAD (Asp-Glu-Ala-Asp) box polypeptide 27	BC011321	2.7	7.6
Programmed cell death 1 ligand 2	AF142780	2.7	5.7
DNA fragmentation factor, beta subunit	AK077619	2.2	4.1
DNA fragmentation factor, alpha subunit	AK051011	2.6	3.6
Cytokine induced apoptosis inhibitor 1	AK088757	2.3	3.1
Caspase recruitment domain family, member 14	NM_130886	1.7	3.1
Death effector domain-containing	AK054496	2.1	3.0
Caspase recruitment domain family, member 11	AK131134	1.8	2.8
Baculoviral IAP repeat-containing 5	BC004702	1.2	2.8
Fas apoptotic inhibitory molecule	AK044452	3.1	2.6
PYD and CARD domain containing	AK050905	2.3	2.6
Bcl-associated death promoter	L37296	1.8	2.4
Programmed cell death 5	CF583222	1.4	2.1
P53 and DNA damage regulated 1	NM_178939	3.1	2.0
Caspase 9	BC056447	0.5	1.9
Cell division cycle and apoptosis regulator 1	BC079652	2.4	1.4
Caspase 1	BC008152	2.1	0.4

19. Stress Proteins

Uridine phosphorylase 1	D44464	1.6	39.6
Heat shock 70kDa protein 14	AK031579	1.1	6.1
Heat shock 70kDa protein 12A	AB093239	1.6	3.9
Hypoxia-inducible factor 1, alpha subunit inhibitor	BC060117	2.7	2.9
Heat shock transcription factor 4	AB029349	3.3	2.8
Heat shock protein 12B	BC011103	2.3	2.4
Heat shock protein 1 (chaperonin 10)	BE984092	1.2	2.4
Heat shock protein 1, alpha	BC057287	1.8	2.3
Serum deprivation response	BC027005	4.1	2.1

20. Toll-like Receptors (TLRs)

Toll-like receptor 12	AY510705	1.0	2.8

Toll-like receptor 8	AY035890	1.2	2.2
Toll-like receptor 11	AY510704	1.4	1.8
Toll-like receptor 4	AF110133	2.8	1.8

21. NOD Like Receptors (NLRs)

Baculoviral IAP repeat-containing 1e (Naip5)	AF135492	16.0	26.8
Baculoviral IAP repeat-containing 1b (Naip2)	NM_010872	2.8	3.1
Baculoviral IAP repeat-containing 5	BC004702	1.2	2.8
Triggering receptor expressed on myeloid cells-like 1	AK017256	1.9	2.8
Leucine rich repeat and fibronectin type III domain	AK083920	1.9	2.7
Baculoviral IAP repeat-containing 1f (Naip6)	AF135494	1.6	1.9
Baculoviral IAP repeat-containing 1a	AF007769	2.1	1.7

22. C-type Lectin Receptors (CLRs)

C-type lectin domain family 2, member d	AY320031	9.1	9.4
C-type lectin domain family 4, member a2	AK049002	3.6	6.2
Mannose receptor, C type 2	U56734	3.4	6.1
C-type lectin domain family 7, member a	AF262985	5.4	5.7
C-type lectin domain family 4, member g	AK016282	2.8	4.6
C-type lectin domain family 4, member n	BC023008	1.2	3.7
C-type lectin domain family 4, member d	AK089500	1.3	3.5
Killer cell lectin-like receptor subfamily G, member 1	AF097357	1.1	3.5
C-type lectin domain family 4, member f	AK040696	0.5	3.4
C-type lectin domain family 4, member a1	BC049354	0.9	3.1
C-type lectin domain family 4, member a3	AK014135	1.3	3.0
C-type lectin domain family 4, member e	AK036493	1.7	2.9
Lectin, mannose-binding 2	BC055327	1.1	2.6
Mannose receptor-like precursor	AY223868	1.6	2.5
Galanin receptor 1	NM_008082	1.2	1.7

23. Myosin and Epithelial Barrier Function

Myosin, light polypeptide 9, regulatory	XM_485171	374.5	208.5
CDC42 small effector 2	BC034079	24.0	21.1
Guanosine diphosphate (GDP) dissociation inhibitor 2	U07951	2.9	9.8
ADP-ribosylation factor GTPase activating protein 1	BC027794	7.3	9.3
Myosin, light polypeptide 7, regulatory	CA786457	1.3	8.8
Guanosine diphosphate (GDP) dissociation inhibitor 1	BC025606	4.8	4.8
Rho GDP dissociation inhibitor (GDI) alpha	AK077343	0.9	4.1
Wiskott-Aldrich syndrome protein interacting protein	BC049788	1.5	3.5
CDC42 effector protein (Rho GTPase binding) 2	AK083004	1.3	2.8
CDC28 protein kinase 1b	AI892533	1.9	2.4

24. Cell Proliferation and Differentiation

Dedicator of cyto-kinesis 2	AY027438	5.4	8.9
Schlafen 9	AY217035	3.2	5.8
Kruppel-like factor 5	BC006646	10.2	4.9
Schlafen 2	AF099973	1.3	4.8
Growth differentiation factor 3	AK082877	5.3	4.5
Schlafen 5	AK036486	1.2	4.2

Epithelial mitogen	AJ291391	6.1	3.8
Suppression of tumorigenicity 14 (colon carcinoma)	AK052738	2.2	3.6
Wnt inhibitory factor 1	AK077698	2.2	3.4
Schlafen 1	BC052869	1.2	3.3
Endothelial differentiation, sphingolipid G-protein-coupled	BC012232	1.1	3.2
Cell division cycle associated 8	AK031571	0.9	3.2
Schlafen 8	AY261798	0.9	3.2
Kruppel-like factor 12	AI048551	2.6	2.9
Schlafen 4	BC044865	0.9	2.8
Neoplastic progression 3	AK089976	0.8	2.7
Dedicator of cyto-kinesis 3	AY145302	2.7	2.6
Immature colon carcinoma transcript 1	BC079614	3.9	2.6
KiSS-1 metastasis-suppressor	AY182231	1.6	2.4
Schlafen 9	AY217035	1.7	2.4
Schlafen 10	AY261802	0.8	2.1
Kruppel-like factor 15	AK009739	2.1	2.0
Kruppel-like factor 2 (lung)	U25096	2.2	1.8

25. Interferon Stimulated Genes

Interferon activated gene 202B	M31418	10.9	19.5
Interferon-induced protein with tetratricopeptide repeats 2	BC050835	1.2	17.8
Interferon-induced protein with tetratricopeptide repeats 3	AK077459	1.5	6.2
Interferon, alpha-inducible protein 27	CA467412	5.6	5.2
Adenosine deaminase, RNA-specific	AK076413	2.3	4.9
Interferon, alpha-inducible protein 27	CA467412	2.0	4.8
Interferon-induced protein 44	AK085407	0.8	3.4
Interferon inducible protein 1	AK002545	0.8	3.4
Interferon-induced protein with tetratricopeptide repeats 3	AK077459	1.1	3.0
Peptidylprolyl isomerase (cyclophilin)-like 1	BE650561	2.3	2.8
Interferon-induced protein with tetratricopeptide repeats 3	AK077459	0.3	2.5
Myxovirus (influenza virus) resistance 1	M21038	0.9	2.4
2'-5' oligoadenylate synthetase 2	AF418010	0.7	2.3
Interferon (alpha and beta) receptor 2	BC071225	2.1	2.2
Protein kinase, interferon-inducible double stranded RNA	AK028602	1.1	1.9

26. NF-κB Signalling

Ubiquitin D	NM_023137	1.1	21.8
Ubiquitin-conjugating enzyme E2, J1	AK031669	2.2	3.4
Deubiquitinating enzyme 1	U41636	1.7	3.0
Ubiquitin specific protease 16	AK043931	2.6	3.0
Nuclear factor of kappa light polypeptide gene enhancer in B-c	NM_008690	3.8	2.4
Inhibitor of kappaB kinase gamma	AK037020	1.8	2.3
NF-κB inhibitor interacting Ras-like protein 1	AK028539	0.9	2.3
Inhibitor of kappaB kinase beta	AF088910	1.4	2.3
Nuclear factor of kappa light chain gene enhancer in B-cells in	BF179988	1.0	2.0

27. TNF Related Genes

Tumor necrosis factor, alpha-induced protein 9	BC006651	0.9	9.4
Traf2 binding protein	BC065775	2.3	8.7
Tumor necrosis factor receptor superfamily, member 8	U25416	0.4	4.1

Interleukin-1 receptor-associated kinase 2	BC085324	2.4	3.7
Tumor necrosis factor, alpha-induced protein 2	AK087680	1.3	3.7
Tumor necrosis factor receptor superfamily, member 5	AK089861	2.0	3.7
Tumor necrosis factor alpha induced protein 6	BC021155	2.9	3.6
Tumor necrosis factor receptor superfamily, member 19-like	AK088621	2.3	3.0
Tumor necrosis factor receptor superfamily, member 25	AF329969	2.2	2.9
Tnf receptor associated factor 4	AK040877	2.3	2.7
Tumor necrosis factor receptor superfamily, member 7	L24495	2.5	2.7
Tumor necrosis factor (ligand) superfamily, member 15	AY764130	2.3	2.5
TNFRSF1A-associated via death domain	AK018592	1.4	2.4
Interleukin-1 receptor-associated kinase 1 binding protein 1	AK076594	0.7	2.2
Interleukin-1 receptor-associated kinase 4	AK029028	1.1	1.9

28. Lysosomal Enzymes/Extracellular Matrix Degrading Enzymes

Mannosidase 2, alpha B1	AK035551	11.4	22.8
Glucosidase 1	BC051949	9.7	10.7
Glucosidase, beta, acid	NM_008094	19.0	10.3
Chondroitin sulfate proteoglycan 3	BC065118	1.3	3.9
Lysophospholipase-like 1	BC027340	5.8	3.9
Heparanase	AK040471	1.6	3.8
Chitinase 1 (chitotriosidase)	AY458654	1.3	3.7
Chondroitin sulfate proteoglycan 4	AF352400	2.0	3.6
Chitinase 3-like 3	BC061154	2.0	3.6
Phospholipase A2, group III	AK046215	2.0	2.6
Lysosomal trafficking regulator	U70015	1.7	2.6
Mannosidase, beta A, lysosomal	NM_027288	2.3	2.2

29. Adhesion Molecules

CEA-related cell adhesion molecule 10	BF579131	66.3	30.7
CEA-related cell adhesion molecule 13	AK005430	3.3	7.3
Selectin, platelet (p-selectin) ligand	NM_009151	2.0	4.9
Vascular cell adhesion molecule 1	AK085320	2.0	4.0
Selectin, lymphocyte	BC052681	1.0	3.3
Intercellular adhesion molecule 2	X65493	3.5	3.2
Mucosal vascular addressin cell adhesion molecule 1	L21203	1.9	2.8
Selectin, endothelial cell	M87862	0.8	2.4
Ninjurin 2	BE647008	1.0	2.4
CEA-related cell adhesion molecule 9	L49180	1.7	2.2
Neural cell adhesion molecule 2	AF001286	1.2	1.9

30. Prostaglandin Metabolism

Phospholipase A2, group IIA (platelets, synovial fluid)	BQ938713	1.6	20.0
Prostaglandin D receptor	AK032488	3.8	4.5
Leukotriene B4 receptor 1	AF044030	3.3	3.5
Prostaglandin F2 receptor negative regulator	NM_011197	1.9	3.5
Leukotriene B4 receptor 2	AK036836	2.9	3.4
Arachidonate 12-lipoxygenase, 12R type	Y14334	1.7	2.9
Arachidonate 15-lipoxygenase, second type	AK028724	1.6	2.8
Prostaglandin F receptor	AK087833	1.3	2.8
Arachidonate 12-lipoxygenase	AK087724	1.2	2.4

Arachidonate 15-lipoxygenase	BC056625	0.9	2.4
Arachidonate 5-lipoxygenase activating protein	AK036547	1.5	1.9

31. Cytotoxicity Inducing Genes

Natural cytotoxicity triggering receptor 1	BC042788	2.2	5.4
Granzyme B	BC002085	1.0	4.8
Granzyme F	X14094	2.5	3.4
Granzyme C	AI323531	1.3	3.1
Perforin 1 (pore forming protein)	NM_011073	1.8	3.0
Granzyme A	M13226	0.5	2.9
Granzyme K	AB032200	1.3	2.7
Granzyme M (lymphocyte met-ase 1)	BF237083	2.1	2.6
Interferon gamma	AK089852	1.4	2.6

32. Reactive Oxygen Species Generating Enzymes

NADPH oxidase 1	AF539799	1.5	4.4
NADPH oxidase 3	AY182377	2.1	3.5
NADPH oxidase activator 1	NM_172204	3.8	3.4
NADPH oxidase organizer 1	AK088226	3.2	3.3
NADPH oxidase 4	AB042745	1.5	2.6
Myeloperoxidase	X15313	1.6	1.8

33. Lymphocyte Activation

Nuclear factor of activated T-cells, cytoplasmic, calcineurin-de	AK083609	4.7	14.0
T-cell specific GTPase	AK089836	1.3	7.0
Lymphocyte antigen 86	AK027929	2.2	4.7
Signaling lymphocytic activation molecule family member 1	AK020012	1.6	3.6
Lymphocyte antigen 9	BC055380	1.6	3.6
Inducible T-cell co-stimulator	AJ250559	2.8	3.5
Linker for activation of T cells	BC052340	0.9	3.4
T-cell receptor gamma, variable 2	X00697	2.6	3.3
T-cell receptor gamma, variable 5	Z48591	1.8	3.2
Inducible T-cell co-stimulator	AJ250559	1.9	3.1
T-cell receptor alpha chain	AK037357	0.9	3.1
Lymphocyte antigen 6 complex, locus A	BF118616	0.7	2.7
Lymphocyte antigen 78	D37797	1.6	2.7
Lymphocyte-activation gene 3	X98113	0.7	2.5
Lymphocyte antigen 75	U19271	0.9	2.2
T-cell, immune regulator 1	NM_016921	1.0	2.0
Mal, T-cell differentiation protein 2	AK035986	2.2	1.9

34. Mitogen Activated Protein Kinases

Dual specificity phosphatase 12	BC022696	2.8	6.8
Mitogen activated protein kinase kinase kinase 5	AB006787	3.1	5.0
Mitogen activated protein kinase 13	BC001992	2.5	4.2
Mitogen-activated protein kinase kinase 1 interacting protein	AF082526	2.8	3.9
Dual-specificity tyrosine-(Y)-phosphorylation regulated	BC052324	1.9	3.6
Dual specificity phosphatase 2	NM_010090	2.2	2.5
Dual specificity phosphatase 10	AK088186	0.5	2.5

Mitogen activated protein kinase kinase kinase 4	U85607	2.1	2.3
Janus kinase 2	BC054807	2.0	2.3
Phosphatidylinositol 3-kinase, C2 domain containing, alpha	BY027046	1.0	2.0
Mitogen activated protein kinase 1	AK048159	1.1	1.9
Mitogen-activated protein kinase 4	NM_172632	1.9	1.8
Phosphatidylinositol 3-kinase, regulatory subunit, polypeptide	BC006796	1.8	1.7

35. AminoAcid Metabolism

Histidine ammonia lyase	NM_010401	1.6	5.8
Arginase 1, liver	NM_007482	0.8	5.3
Kynureninase (L-kynurenine hydrolase)	BC026950	3.6	3.2
Histidine decarboxylase	BC052833	1.3	2.8
Tyrosinase	M24560	1.3	2.7
Tyrosine hydroxylase	M69200	1.5	2.7
Glutaminase	AW047654	2.0	1.8
Glutaminase 2 (liver, mitochondrial)	XM_125928	0.7	1.8

36. Complement Genes

Complement component C1SB	AF459020	2.8	25.4
Complement component 3	BC043338	1.6	4.2
Complement component 1, q subcomponent, beta polypeptide	BU758239	0.7	4.1
Complement component 1, q subcomponent, gamma	BI653311	1.8	3.9
Complement component 1, s subcomponent	BC022123	1.4	3.4
Complement component C1SB	AF459020	1.8	3.0

37. Macrophage Activation

Macrophage activation 2	NM_008620	1.3	18.2
Macrophage stimulating 1 receptor (c-met-related tyrosine	X74736	5.7	8.9
Macrophage receptor with collagenous structure	NM_010766	0.6	3.0
Macrophage expressed gene 1	L20315	3.2	2.9
Macrophage scavenger receptor 1	L04275	2.9	2.6

38. LPS Signaling Genes

Lipopolysaccharide binding protein	X99347	2.5	5.9
LPS-induced TN factor	AK078708	1.7	3.3
CD14 antigen	BF120684	1.2	2.5
Moesin	AK088336	1.2	2.0
Toll-like receptor 4	AF110133	2.8	1.8

39. Neutrophil Related proteins

NADPH oxidase 1	AF539799	1.5	4.4
Formyl peptide receptor 1	NM_013521	1.3	3.6
NADPH oxidase 3	AY182377	2.1	3.5
NADPH oxidase activator 1	NM_172204	3.8	3.4
NADPH oxidase organizer 1	AK088226	3.2	3.3
Neutrophil cytosolic factor 2	BC076609	1.1	3.0
Neutrophil cytosolic factor 4	AB002665	1.5	2.8
NADPH oxidase 4	AB042745	1.5	2.6
Neutrophil cytosolic factor 2	BC076609	0.8	2.0

40. Genes Promoting Fibrosis (Cornification)			
Transglutaminase 2, C polypeptide	AK080224	39.1	76.0
Transglutaminase 5	AK037074	2.1	3.7
Transglutaminase 4 (prostate)	AK035279	1.2	2.3

41. Miscellaneous Genes			
Nitric oxide synthase trafficker	BC069942	83.3	108.7
Prefoldin 5	BE991713	31.6	40.6
Solute carrier family 9 (sodium/hydrogen exchanger), member	XM_127434	55.0	52.0
B-cell linker	Y17159	2.7	27.3
Myeloid-associated differentiation marker	AJ001616	25.9	20.7
Angiotensin II, type I receptor-associated protein	BC046820	16.5	18.9
TAO kinase 1	AK173156	13.8	18.4
Stabilin 1	AF290914	12.1	18.2
Laminin, gamma 2	U43327	4.4	17.5
Chitinase 3-like 1	NM_007695	1.7	16.7
RAB19, member RAS oncogene family	AK050660	4.8	15.6
Fc receptor, IgG, alpha chain transporter	BC003786	22.9	15.1
Amyloid beta precursor protein (cytoplasmic tail) binding	AK122222	24.3	14.3
Adducin 1 (alpha)	AK054558	7.3	12.8
Glutamate receptor, ionotropic, kainate 3	XM_131647	5.3	11.5
Signal recognition particle 68	BC070422	2.9	11.0
Phosphodiesterase 4C, cAMP specific	NM_201607	3.7	10.2
Cysteine-rich secretory protein 1	NM_009638	4.6	9.9
Class II transactivator	U60653	1.3	9.7
Desmocollin 3	AK048049	1.7	9.6
Importin 4	BC085150	5.1	9.2
Endothelin converting enzyme-like 1	AK039467	4.2	9.0
Restin-like 2	AK029962	4.5	8.8
Myosin, light polypeptide 7, regulatory	CA786457	1.3	8.8
Sortilin 1	BC056343	11.2	8.6
MARCKS-like protein	X61399	1.1	8.5
Ring finger protein 149	XM_129803	2.1	8.2
Catechol-O-methyltransferase	BC010402	5.6	8.0
Tachykinin 1	AK015286	2.0	7.7
Midnolin	AB036882	5.2	7.7
Melanophilin	AF384098	2.8	7.3
MARCKS-like protein	X61399	1.4	6.8
Neuregulin 4	AK080058	3.1	6.6
Tubulin, alpha 3	AK088829	4.2	6.5
Small proline-rich protein 2K	AY158995	3.0	6.4
Neuropilin (NRP) and tolloid (TLL)-like 1	AK043710	5.5	6.4
Natriuretic peptide receptor 2	BC042470	3.0	6.1
Coronin, actin binding protein 1A	AF143955	1.9	6.0
Apolipoprotein E	BF235575	2.4	5.8
Oogenesin 2	BC052839	6.1	5.6
Crystallin, gamma S	CA452214	2.0	5.5
Nidogen 2	AB017202	4.2	5.5
MARCKS-like protein	X61399	0.9	5.2

Calbindin 2	NM_007586	6.0	5.2
Urocortin 3	BB433553	3.9	5.1
Myosin IG	AK088011	1.9	5.0
Gamma-aminobutyric acid (GABA-A) receptor, subunit theta	AK038859	1.9	5.0
Gasdermin domain containing 1	AK088747	2.1	4.9
Amyloid beta (A4) precursor protein-binding, family A,	BC057620	2.1	4.7
Beta-2 microglobulin	BF539742	2.1	4.7
Laminin, alpha 1	J04064	1.9	4.7
Growth hormone secretagogue receptor	AK049671	2.3	4.6
Sarcoglycan, delta (dystrophin-associated glycoprotein)	AK038503	3.5	4.6
Vomeronasal 1 receptor, A2	Y12724	2.1	4.4
Otoraplin	AK047965	3.0	4.4
Osteocrin	AY395730	2.2	4.4
Glutamate receptor, metabotropic 7	BC080315	3.7	4.2
Stomatin	U17297	1.8	4.2
Keratinocyte associated protein 1	AK028972	2.5	4.1
Vomeronasal 2, receptor, 1b	AY426342	2.1	4.1
Suprabasin	BC029705	1.7	4.0
Meprin 1 beta	L15193	2.1	3.9
Glutamate receptor, ionotropic, NMDA2C (epsilon 3)	NM_010350	2.0	3.9
Adrenergic receptor, alpha 1b	AK043877	3.7	3.8
Sulfatase 2	AK129316	1.7	3.8
Apolipoprotein D	AK049914	1.0	3.8
Tubulin, gamma 1	BC006581	3.8	3.7
Max interacting protein 1	BC064453	1.7	3.7
Lactase-like	AF309072	1.7	3.7
MHC I - like leukocyte 1	AK029010	2.5	3.7
Kallikrein 21	BF300069	1.3	3.7
Gap junction membrane channel protein beta 4	NM_008127	1.7	3.7
Gamma-aminobutyric acid (GABA-A) receptor, subunit	AK047085	2.3	3.7
Vomeronasal 1 receptor, E13	AF394948	2.1	3.7
Thymidylate synthase	AK035663	4.8	3.7
Glypican 1	AF185613	1.7	3.7
Thrombospondin 4	AF102887	1.5	3.6
Amyloid beta (A4) precursor protein-binding, family A,	BC057620	0.9	3.6
Neurotensin	BE956015	4.0	3.5
Fatty acid binding protein 6, ileal (gastrotropin)	BX633352	1.3	3.5
Wiskott-Aldrich syndrome protein interacting protein	BC049788	1.5	3.5
Retinol binding protein 3, interstitial	BC017610	0.9	3.4
Gamma-aminobutyric acid (GABA-A) receptor, subunit alpha	BC062112	1.5	3.4
Villin-like	AK028229	2.7	3.4
Stanniocalcin 2	AK046655	1.8	3.4
Kallikrein 21	BF300069	2.7	3.4
Glutamate receptor, ionotropic, AMPA1 (alpha 1)	BC056397	2.8	3.4
Coronin, actin binding protein 6	NM_139130	1.7	3.4
Holocytochrome c synthetase	AK028608	4.5	3.4
Aggrecan 1	L07049	1.8	3.3
Sodium channel, voltage-gated, type I, alpha polypeptide	L42339	2.2	3.3
B-cell translocation gene 1, anti-proliferative	BC018309	1.8	3.3
Deiodinase, iodothyronine, type II	AF096875	2.5	3.3
Histocompatibility 2, class II antigen E beta	M73960	0.1	3.3

Adrenergic receptor, alpha 1d	NM_013460	1.0	3.3
Cystatin 9	CN836485	0.9	3.3
B-cell translocation gene 1, anti-proliferative	BC018309	2.2	3.3
Adipsin	AI325224	0.3	3.2
Lipidosin	AB050554	1.9	3.2
Gamma-aminobutyric acid (GABA-A) receptor, subunit	AK047085	3.6	3.1
Neuromedin U receptor 2	AK036756	2.0	3.1
Growth hormone	CB236622	1.5	3.1
Neurexin I	AK037724	2.5	3.1
FK506 binding protein 1a	AK010693	1.6	3.0
Neurogenic differentiation 2	BC058965	1.2	3.0
Glutamate receptor, ionotropic, kainate 5 (gamma 2)	BC052009	3.0	3.0
Myoglobin	CA461550	2.5	3.0
Stanniocalcin 2	AK046655	1.3	2.9
Max interacting protein 1	BC064453	1.6	2.8
Parathyroid hormone-like peptide	NM_008970	2.3	2.8
Tissue factor pathway inhibitor 2	NM_009364	3.1	2.8
Hemochromatosis type 2 (juvenile) (human homolog)	NM_027126	1.2	2.8
Lactamase, beta 2	AK090091	1.3	2.8
Ornithine decarboxylase antizyme	BF785862	1.1	2.8
Rotatin	NM_175542	2.2	2.8
Cytochrome c oxidase, subunit Vb	BQ044187	1.4	2.7
Carbonic anhydrase 6	BF302570	1.4	2.7
Geminin	BE982992	1.6	2.7
EGF-like module containing, mucin-like, hormone receptor-	AK037483	1.9	2.7
Cortactin	BC011434	1.2	2.7
Laminin, gamma 2	U43327	1.6	2.7
Angiotensin II receptor, type 2	AK086334	2.0	2.7
Secernin 2	BC010784	1.8	2.6
Profilin 3	CA463381	1.2	2.6
Glypican 6	BQ032674	2.2	2.6
Attractin	NM_009730	3.3	2.6
Stratifin	AF058798	0.5	2.6
Gasdermin domain containing 1	AK088747	0.6	2.6
Glutamate receptor, ionotropic, kainate 4	AK080582	1.8	2.6
Growth hormone releasing hormone receptor	AK030504	1.0	2.5
Stratifin	AF058798	1.0	2.5
Sialophorin	AK077764	0.5	2.5
WNT1 inducible signaling pathway protein 2	BC032877	1.5	2.5
Purinergic receptor P2Y, G-protein coupled 2	NM_008773	1.3	2.5
Cyclin D1	NM_007631	1.1	2.5
Natriuretic peptide receptor 3	BC055897	2.5	2.5
KiSS-1 metastasis-suppressor	AY182231	1.6	2.4
Tubulin, alpha 3	AK088829	0.8	2.4
Cyclin D1	NM_007631	1.1	2.3
Recombination activating gene 1	M29475	1.8	2.3
Paraoxonase 1	BC012706	4.7	2.3
Nestin	BC062893	2.7	2.3
LanC (bacterial lantibiotic synthetase component C)-like 2	AK083533	2.0	2.3
Vomeronasal 2, receptor, 1b	AY426342	0.7	2.3
AKT1 substrate 1 (proline-rich)	AK030571	1.7	2.2

Adiponutrin	AY037763	2.3	2.2
Angiomotin	AK129277	1.0	2.1
Galactokinase 2	AK082521	4.9	2.1
Gasdermin 1	AK028698	1.8	2.1
Fibronectin 1	AK090130	1.5	2.1
Cyclin D1	NM_007631	1.7	2.1
Nitric oxide synthase interacting protein	AK076736	2.3	2.1
Decay accelerating factor 2	L41365	0.7	2.1
Laminin, gamma 2	U43327	0.7	2.1
Vomeronasal 2, receptor, 1b	AY426342	1.0	2.1
Tubulin, alpha 3	AK088829	1.2	2.0
Calreticulin	X14926	1.2	2.0
Cytochrome c oxidase, subunit Vb	BQ044187	2.0	2.0
Chondroitin sulfate proteoglycan 3	BC065118	0.5	2.0
Brca1 associated protein 1	AK079374	1.6	2.0
Chondroitin sulfate proteoglycan 3	BC065118	1.5	2.0
Adrenergic receptor, alpha 1d	NM_013460	1.8	1.9
Natriuretic peptide receptor 3	BC055897	1.8	1.8
Rotatin	NM_175542	1.3	1.8
Teratocarcinoma-derived growth factor	M87321	0.7	1.7
Profilin 3	CA463381	1.2	1.7
Secernin 1	AK129084	2.2	1.7
Cyclin D1	NM_007631	0.9	1.7
Cytochrome c oxidase, subunit VIIIb	CA460425	3.2	1.6
Cystatin 10 (chondrocytes)	BF302631	1.4	2.5

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Supplementary Methods

RT-PCR. Validation of microarray results was done using SYBR Green (Molecular Probes). Cycle threshold differences were quantitated on an I-cycler (Bio-Rad) relative to GAPDH to control for total starting RNA levels in each samples, and experiments were performed in triplicate. qRT-PCR primer sets were designed specific to the GAPDH (sense: 5' ACCCAGAAGACTGTGGATCG 3'; antisense: 5' GGATGCAGGGATGATGTTCT 3') and TLR4 (sense 5' AAG GCA TGG CAT GGC TTA CAC 3' antisense : 5' AGA GGC CAA TTT TGT CTC CAC AG 3').

Isolation of splenocytes. Spleens from WT and TLR5KO mice (n=5) were pulverized, filtered, and washed 3x times with ice cold HBSS and plated 2.5 x 10^6cells /well and stimulated at 37^{o}C with 10ng/ml of LPS (Sigma) for 24 h in serum free DMEM supplemented with penicillin and streptomycin and supernatants were tested for IFNγ by ELISA.

Isolation of peritoneal macrophages. WT and TLR5KO mice (n=5) were sacrificed by CO_2 inhalation and injected intraperitoneally with 10 ml of cold, sterile PBS. Cells (2.0 x 10^6cells/well) incubated at 37 ^{o}C for 3 h in complete DMEM with penicillin and streptomycin, washed 3x times and stimulated with 10 ng/ml LPS for 24 h in serum free DMEM supplemented with penicillin and streptomycin.

Supplementary Figure/Table Legends

Supplementary Table 1 Global profiling of colonic gene expression in TLR5KO mice. Microarray analysis was used to compare relative levels of colonic mRNAs between TLR5KO mice (T5KO-L or T5KO-H) and WT littermates as described in Methods. Table lists genes that met an arbitrarily set cut-off of absolute expression (in TLR5KO) and that were upregulated at least 1.8 fold. Data is provided as fold-change in expression relative to WT mice.

Supplementary Figure 1 TLR5KO mice exhibit reduced flagellin-induced cytokine production. TLR5KO mice (n=3) or WT littermates were injected with 10 μg of flagellin intraperitoneally. Serum (**a**) IL-6 and (**b**) KC were assayed at 90 min by ELISA.

Supplementary Figure 2 LPS, but not flagellin induces TNFα. C57BL/6 mice (n=4) were injected with 10 μg LPS or 50 μg of flagellin. Serum (**a**) KC (**b**) TNFα were measured at indicated times by bead based cytokine assay.

Supplementary Figure 3 TLR5KO mice develop morphologically normal gut-associated lymphoid tissue. Intestines from 6-week old TLR5KO mice (and WT mice not shown) were flash frozen, cut into thin sections and either H & E stained or subjected to immunohistochemical analysis using antibodies that label B-cells (B220 in green), T-cells (thy 1.2 in blue), or dendritic cells (cd11C in red). (**a-e)** examines a single Peyer's patch that

was representative of at least 3 examined in 3 different WT and KO mice. **f.** shows a typical cryptopatch in TLR5KO, a feature also indistinguishable in WT and TLR5KO mice.

Supplementary Figure 4. Protein conformation of microarray results: TLR5KO mice show altered spontaneous colonic cytokine expression. Colons from WT, TLR5 KO mice were cultured for 24 h as described in Methods. Supernatants were analyzed for (**a**) IL-10, (**b**) IL-18 (**c**) (i) MUC2 (ii) MMP-7 (iii) MMP-9 by ELISA and immunoblotting. (**d**) Quantitative real-time PCR for TLR4 gene in colons of WT, TLR5KO (low SAA), Colitic TLR5KO (high SAA)

Supplementary Figure 5. *Ex vivo* response of TLR5KO splenocytes and resident macrophages to LPS. Splenocytes and peritoneal macrophages were isolated from non-robustly colitic (low-SAA) TLR5KO mice and WT littermates. (**a**) Splenocytes (2 x 10^6/ml) were stimulated with 100 ng/ml LPS for 24 h. IFNγ production was measured by ELISA (**b**) Peritoneal macrophages (2.5 x 10^6/ml) were stimulated with 10 ng/ml LPS for 24 h. KC levels in supernatants were measured by ELISA.