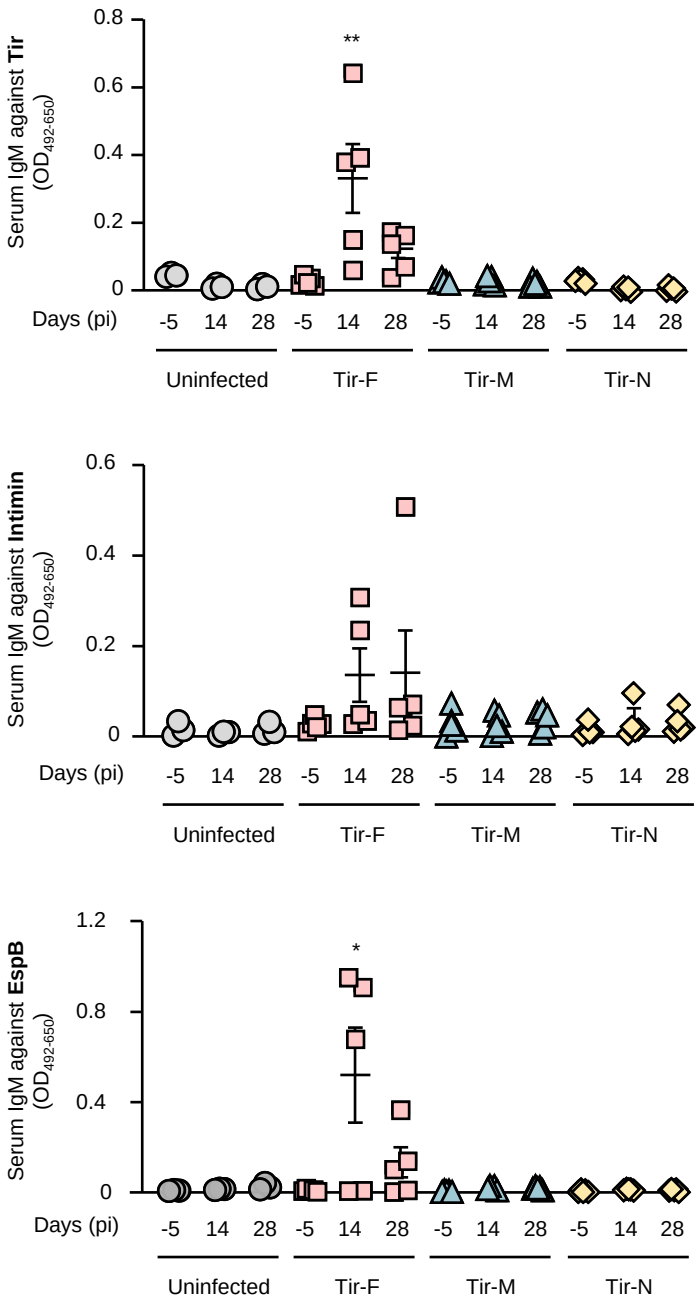
Supplemental Figure 1



Supplemental Figure 1. IgM antibody titers against virulence factors. Mice were infected orally with Tir-F, -M, -N, or uninfected. The levels of serum IgM against Tir, Intimin, and EspB were determined by ELISA (means ± SEM, n = 3-5). Significance was determined by the Kruskal-Wallis test and Dunnett post hoc test. * p-value < 0.05, ** p-value < 0.01. Data from one representative experiment of two independent experiments are shown.

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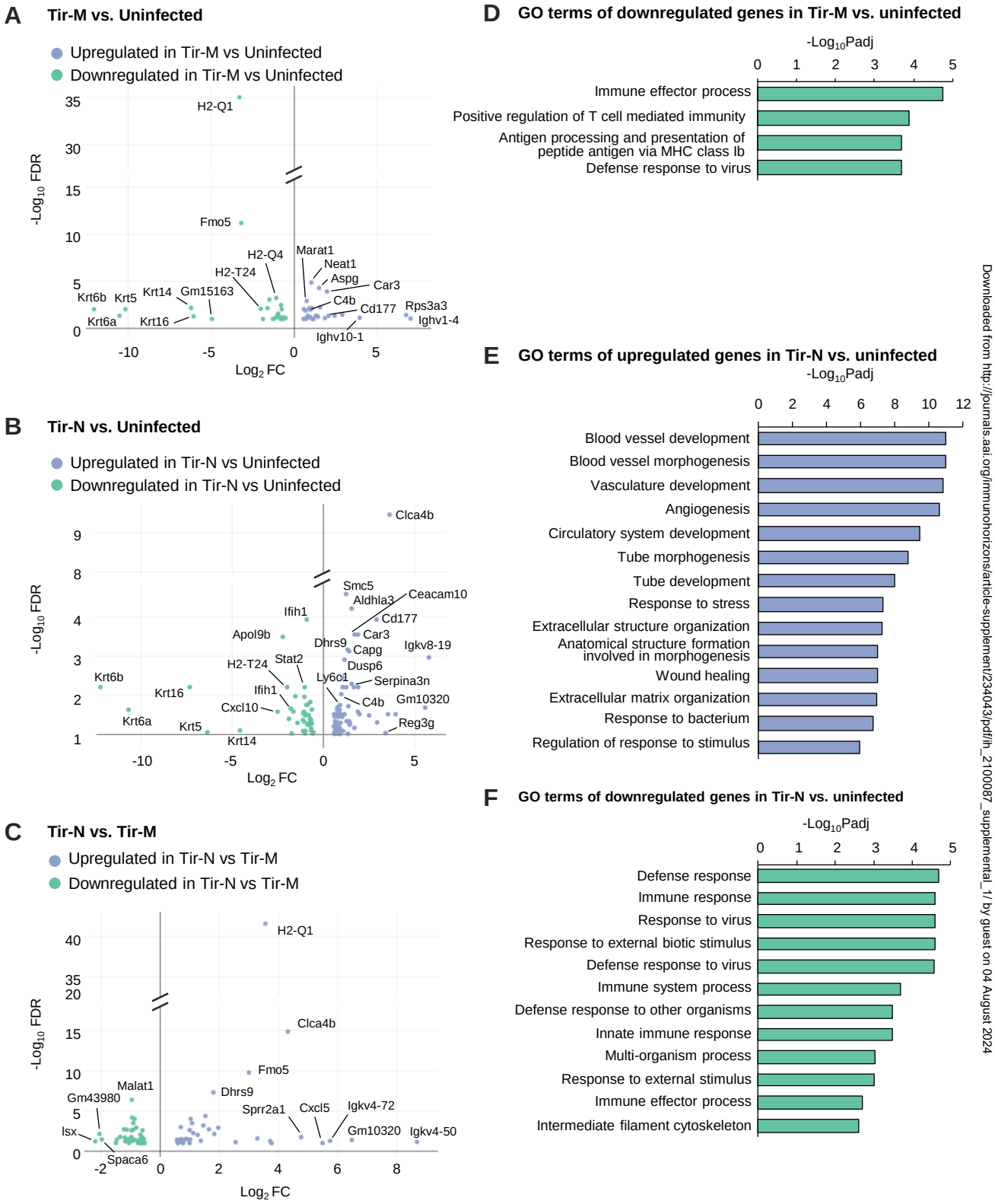
Supplemental Figure 2



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Supplemental Figure 2. DEG and Gene Ontology (GO) analyses of Tir-M- or Tir-N-infected mice. Volcano plots of DEGs. (**A**) Tir-M-infected vs. Uninfected groups, (**B**) Tir-N-infected vs. Uninfected groups, and (**C**) Tir-N- vs. Tir-M-infected groups. (**D**) GO analysis of genes downregulated in Tir-M-infected mice compared to those in uninfected mice. (**E, F**) GO analysis of genes upregulated (**E**) or downregulated (**F**) in Tir-N-infected mice compared to those in the uninfected mice. The X-axis indicates $-\text{Log}_{10}$ adjusted P values (Padj), and the y-axis indicates enriched biological processes.

Supplemental Table 1. Primer sets used for RT-qPCR.

Gene	Forward primer (5' to 3')	Reverse primer (5' to 3')	Ref.
ler	GAGCAGGAGATTCAAACTGT	TACCCCAGTTCTTGTAAGGT	14
espB	CGCAAAGCTATAACATCCAAC	AGCCTAAAATCCCCAGGAC	this study
Tir	GCTTCCTGAACATCCATTGC	ACCTCTACACCATCTTTTACCC	this study
ces-T	GGTTTGCAGAGAATGGTGGAC	AACGTCATCGAGAGGGAAACG	this study
eae	TTATTCATGGTTTTTGCACC	AAAACAATCCTAAACCAGCA	14
nanoluc	ACCTGGACCAAGTCCTTGAAC	TCAGCCCATTTTCACCGCTC	this study
Saa3	GCAACTACTGGGTTGAGATA	ATTCAGCACATTGGGATG	10
Saa4	AGGAGAGAGAAAGCAGCAG	CAAGCCTCATGATGCGACTC	this study
Cxcl1	TGGCTGGGATTCACCTCAAGAACA	TGTGGCTATGACTTCGGTTTGGGT	19
IL-17A	TTTAACTCCCTTGGCGCAAAA	CTTTCCCTCCGCATTGACAC	[a]
Plet1	CGTGGTCCTTGATAACATCT	TCACGGCACTGACTGAA	26
Nos2	TTCAGCACATCTGCAGACAC	AGCCTGAAGTCATGTTTGCC	10
Gapdh	GTCGTGGAGTCTACTGGTGTCTTC	GTCATATTTCTCGTGGTTCACACC	10

[a] found in: [Ishigame, H., S. Kakuta, T. Nagai,M. Kadoki, A. Nambu, Y. Komiyama, N. Fujikado, Y. Tanahashi, A. Akitsu,H.Kotaki, et al. 2009. Differential roles of interleukin-17A and -17F in host defense against mucoepithelial bacterial infection and allergic responses. Immunity 30: 108.119.]

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Supplemental Table 2. Selected DEGs involved in immune responses that were increased in Tir-F-infected mice.

Gene	Description	Gene expression (FPKM)							
		U_1	U_2	Tir-F_1	Tir-F_2	Tir-M_1	Tir-M_2	Tir-N_1	Tir-N_2
Saa3	serum amyloid A 3	0.14	0.16	1.16	3.86	0.09	0.05	0.45	0.49
Saa4	serum amyloid A 4	0.00	0.10	0.31	0.70	0.00	0.00	0.00	0.00
Plet1	placenta expressed transcript 1	0.13	0.70	226.25	210.89	0.71	0.56	0.84	1.10
Cxcl1	chemokine (C-X-C motif) ligand 1	0.00	0.00	3.39	3.41	0.00	0.13	1.00	0.26
Cxcl2	chemokine (C-X-C motif) ligand 2	0.00	0.00	1.09	1.92	0.00	0.00	0.17	0.05
Cxcl5	chemokine (C-X-C motif) ligand 5	0.13	0.00	5.14	11.13	0.00	0.00	0.81	0.26
Cxcl9	chemokine (C-X-C motif) ligand 9	0.85	0.62	7.82	5.17	0.81	0.77	0.70	0.68
Cxcl13	chemokine (C-X-C motif) ligand 13	6.72	15.47	46.07	31.05	11.48	21.51	19.78	25.38
Ccl7	chemokine (C-C motif) ligand 7	1.68	1.57	9.41	7.45	1.45	1.83	3.49	3.77
Ccl8	chemokine (C-C motif) ligand 8	1.20	2.25	30.55	28.89	2.49	3.58	8.45	4.19
Ccr5	chemokine (C-C motif) receptor 5	0.06	0.19	0.66	0.78	0.23	0.29	0.30	0.17
Ccr10	chemokine (C-C motif) receptor 10	0.21	0.24	3.18	3.28	0.74	0.71	0.54	0.73
Cxcr2	chemokine (C-X-C motif) receptor 2	0.00	0.00	0.18	0.45	0.11	0.04	0.27	0.26
Duox2	dual oxidase 2	9.90	7.06	51.74	50.16	9.10	8.56	15.19	12.96
Duoxa2	dual oxidase maturation factor 2	3.93	4.21	63.24	60.52	3.20	4.44	6.08	8.01
Nos2	nitric oxide synthase 2, inducible	0.25	0.71	69.14	45.38	0.26	0.58	0.79	0.60
Ly6a	lymphocyte antigen 6 complex, locus A	118.71	169.93	1473.42	1158.42	198.67	163.83	223.51	268.75
Ly6c1	lymphocyte antigen 6 complex, locus C1	12.57	12.23	99.20	143.00	15.19	18.24	22.19	23.91
Cd177	CD177 antigen	10.45	6.12	400.41	359.69	19.66	49.99	55.28	68.08
Reg3b	regenerating islet-derived 3 beta	0.00	0.00	4.24	5.96	0.10	0.11	0.00	2.13
Reg3g	regenerating islet-derived 3 gamma	0.17	0.10	3.77	5.10	0.22	0.06	0.22	2.58
Cd4	CD4 antigen	0.55	0.78	1.50	1.66	0.92	1.18	0.64	2.03
Cd8a	CD8 antigen, alpha chain	0.17	0.26	1.04	1.38	0.35	0.44	0.22	0.21
Cd28	CD28 antigen	0.28	0.12	0.81	0.79	0.23	0.34	0.23	0.25
Gzma	granzyme A	0.00	0.00	14.66	19.57	0.35	0.48	0.23	0.58
Gzmb	granzyme B	0.34	0.07	9.60	14.15	0.08	0.51	0.24	0.14
Pla2g5	phospholipase A2, group V	3.87	3.27	16.88	18.05	2.81	3.76	4.08	4.32
Aicda	activation-induced cytidine deaminase	0.14	0.12	0.93	0.51	0.70	0.28	0.31	0.18
Tnfsf10	tumor necrosis factor (ligand) superfamily, member 10	8.71	6.54	28.07	20.84	6.49	6.11	5.74	7.83
Il17a	interleukin 17A	0.00	0.00	1.20	1.16	0.00	0.00	0.00	0.00
Il17f	interleukin 17F	0.06	0.05	0.53	0.62	0.00	0.12	0.00	0.05
Il21	interleukin 21	0.00	0.00	0.10	0.04	0.00	0.00	0.00	0.00
Igha	immunoglobulin heavy constant alpha	26.37	284.14	947.33	807.64	205.46	124.87	160.93	177.04
Ighm	immunoglobulin heavy constant mu	10.92	25.63	82.44	49.58	36.79	41.74	24.24	44.06
Ighg1	immunoglobulin heavy constant gamma 1	0.24	1.53	4.07	3.03	0.67	0.71	0.63	1.61
Ighg2b	immunoglobulin heavy constant gamma 2B	0.46	1.09	68.88	27.65	3.16	2.32	1.52	6.58
Ighg2c	immunoglobulin heavy constant gamma 2C	0.09	0.16	8.69	3.32	0.35	0.09	0.09	0.15
Ighg3	Immunoglobulin heavy constant gamma 3	0.05	0.54	2.40	1.50	1.38	2.38	0.46	1.94
Jchain	immunoglobulin joining chain	14.07	134.61	350.06	305.38	74.36	43.48	61.87	66.11
Igkc	immunoglobulin kappa constant	135.71	1214.91	3763.80	2785.27	676.20	511.26	645.27	783.77
Ighv1-4	immunoglobulin heavy variable 1-4	0.00	0.00	0.31	11.64	0.99	14.23	1.66	1.39
Ighv1-26	immunoglobulin heavy variable 1-26	0.35	0.00	0.61	17.30	0.00	9.03	4.32	8.87
Ighv1-63	immunoglobulin heavy variable V1-63	0.70	3.28	458.93	223.76	1.98	0.00	4.65	1.66
Ighv2-6-8	immunoglobulin heavy variable 2-6-8	0.00	0.00	1.23	1.20	0.00	0.00	4.33	13.07
Ighv3-4	immunoglobulin heavy variable V3-4	0.00	4.15	86.02	48.65	4.59	0.00	2.31	6.34
Ighv3-6	immunoglobulin heavy variable 3-6	1.75	17.04	59.68	63.43	8.60	5.92	16.00	9.73
Ighv6-3	immunoglobulin heavy variable 6-3	0.34	2.65	105.86	63.83	20.50	3.77	3.28	7.38
Ighv8-8	immunoglobulin heavy variable 8-8	0.34	0.00	0.00	3.51	2.91	9.19	0.00	0.82
Ighv10-1	immunoglobulin heavy variable 10-1	0.00	1.46	2.70	14.29	15.81	7.47	3.25	3.52
Igkv1-135	immunoglobulin kappa variable 1-135	0.00	2.12	13.94	49.17	0.00	0.00	3.26	3.70
Igkv3-2	immunoglobulin kappa variable 3-2	0.00	2.49	20.51	48.20	0.00	0.00	0.93	0.77
Igkv3-7	immunoglobulin kappa variable 3-7	0.34	4.37	18.90	52.80	3.23	1.36	3.90	1.36
Igkv4-53	immunoglobulin kappa variable 4-53	1.34	18.25	1297.10	345.83	3.16	4.32	1.27	7.95
Igkv4-72	immunoglobulin kappa chain variable 4-72	0.00	1.04	91.60	39.33	0.00	0.00	3.19	2.66
Igkv6-13	immunoglobulin kappa variable 6-13	0.00	1.17	90.58	9.92	0.97	1.02	0.32	0.54
Igkv8-19	immunoglobulin kappa variable 8-19	0.00	0.57	21.24	22.92	7.51	2.31	11.35	21.30
Igkv8-24	immunoglobulin kappa chain variable 8-24	0.00	6.59	20.36	27.26	14.60	6.34	1.60	5.07
Igkv8-28	immunoglobulin kappa variable 8-28	0.00	0.28	1.75	1.13	0.00	0.00	5.99	7.36
Igkv12-44	immunoglobulin kappa variable 12-44	1.53	2.61	34.91	13.84	5.20	3.95	5.82	12.62
Iglv1	immunoglobulin lambda variable 1	1.88	15.79	83.99	81.69	12.14	5.92	7.46	16.67
Iglv3	immunoglobulin lambda variable 3	0.97	2.47	10.74	6.05	3.65	4.48	0.92	2.55

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