

Table S1**Mouse Innate and Adaptive Immune Responses Array^a.**

(i) Genes with significant fold-change in at least one comparison group

Gene symbol	1 v Resting ^b		1861 v Resting ^c		1861 v 1 ^d	
	fold-change	p-value	fold-change	p-value	fold-change	p-value
<i>C3</i>	2.33	0.042222	2.33	0.121247	-1	0.7882
<i>C5ar1</i>	4.72	0.010175	2.04	0.190194	-2.31	0.289267
<i>Casp1</i>	2.55	0.025216	4.42	0.004456	1.73	0.069515
<i>Ccr5</i>	3.44	0.028083	3.18	0.030649	-1.08	0.831375
<i>Cd14</i>	36.69	0.013988	28.55	0.000313	-1.29	0.343981
<i>Cd40</i>	3.04	0.08034	6.28	0.000933	2.06	0.140353
<i>Cd80</i>	13	0.019732	5.97	0.000009	-2.18	0.082487
<i>Cd86</i>	2.51	0.021136	4.49	0.001248	1.79	0.052369
<i>Crp</i>	1.19	0.831302	8.2	0.01177	6.91	0.012007
<i>Csf2</i>	14.25	0.000369	9.42	0.000044	-1.51	0.038636
<i>Cxcl10</i>	662.83	0.001682	3386.31	0.00734	5.11	0.018987
<i>Ddx58</i>	2.65	0.063235	5.21	0.045466	1.97	0.1788
<i>H2-T23</i>	1.95	0.004957	3.27	0.027865	1.67	0.115347
<i>Icam1</i>	4.37	0.003849	4.05	0.001961	-1.08	0.717717
<i>Ifna2</i>	2.64	0.124689	9.77	0.010836	3.69	0.039819
<i>Ifnb1</i>	38.72	0.086293	59.94	0.026515	1.55	0.666804
<i>Ifng</i>	55.52	0.003099	345.61	0.001729	6.22	0.004487
<i>Il10</i>	5.5	0.032818	12.21	0.000158	2.22	0.039173
<i>Il13</i>	2.34	0.022911	4.38	0.1004	1.87	0.185129
<i>Il17a</i>	4.59	0.085905	10.04	0.004866	2.19	0.128599
<i>Il1a</i>	12.51	0.000949	20.08	0.000097	1.61	0.041196

<i>Il1b</i>	56.2	0.006878	63.47	0.000089	<i>1.13</i>	0.976548
<i>Il1rl</i>	3.62	0.005194	3.31	0.000258	<i>-1.09</i>	0.552768
<i>Il23a</i>	36.57	0.007967	51.2	0.007169	<i>1.4</i>	0.44115
<i>Il6</i>	146.02	0.000707	161.79	0.039374	<i>1.11</i>	0.489806
<i>Irif7</i>	7.29	0.05966	19.88	0.001002	2.73	0.047797
<i>Itgam</i>	6.55	0.003824	12.58	0.003667	<i>1.92</i>	0.074304
<i>Jak2</i>	2.86	0.018894	3.85	0.025788	<i>1.35</i>	0.322896
<i>Mx1</i>	16.97	0.03917	57.6	0.000637	3.39	0.019798
<i>Myd88</i>	2.65	0.031416	3.22	0.093048	<i>1.21</i>	0.38883
<i>Nfkb1</i>	2.1	0.090458	3.44	0.018081	<i>1.64</i>	0.173956
<i>Nlrp3</i>	38.19	0.004434	54.21	0.001199	<i>1.42</i>	0.287334
<i>Nod2</i>	9.66	0.015706	19.07	0.030232	<i>1.97</i>	0.192484
<i>Slc11a1</i>	3.47	0.034254	2.62	0.0104	<i>-1.33</i>	0.350404
<i>Stat1</i>	1.99	0.023412	6.94	0.010506	3.5	0.020219
<i>Stat3</i>	2.78	0.053387	3.3	0.01169	<i>1.19</i>	0.786819
<i>Tlr2</i>	9.61	0.053321	24.9	0.003962	2.59	0.074846
<i>Tlr3</i>	1.34	0.25329	2.52	0.003177	<i>1.88</i>	0.03784
<i>Tlr4</i>	2.7	0.032918	5.32	0.010844	<i>1.97</i>	0.108524
<i>Tlr5</i>	-2.26	0.002038	-3.69	0.000608	<i>-1.63</i>	0.080217
<i>Tlr8</i>	2.57	0.003939	2.4	0.01732	<i>-1.07</i>	0.765555
<i>Tnf</i>	71.26	0.034427	55.16	0.025604	<i>-1.29</i>	0.578279
<i>Tyk2</i>	-1.38	0.101193	-2.26	0.008972	<i>-1.64</i>	0.04999

(ii) Genes with no significant fold-changes in any comparison group

Gene symbol	1 v Resting ^b		1861 v Resting ^c		1861 v 1 ^d	
	fold-change	p-value	fold-change	p-value	fold-change	p-value
<i>Apacs</i>	-1.1	0.681795	1.18	0.634331	1.29	0.41576
<i>Ccl12</i>	2.37	0.244037	2.83	0.134017	1.19	0.526123
<i>Ccl5</i>	1.88	0.2097	3.16	0.054793	1.69	0.15042
<i>Ccr4</i>	2.47	0.683088	3.11	0.385396	1.26	0.309677
<i>Ccr6</i>	1.39	0.624149	-1.41	0.766939	-1.96	0.44634
<i>Ccr8</i>	1.56	0.411407	2.89	0.061961	1.85	0.492229
<i>Cd4</i>	-2.38	0.331259	-3.26	0.29868	-1.37	0.277646
<i>Cd40lg</i>	-1.46	0.323142	1.06	0.892685	1.55	0.217032
<i>Cd8a</i>	-2.39	0.351103	-2.06	0.36493	1.16	0.46977
<i>Cxcr3</i>	-1.08	0.945753	1.08	0.885355	1.17	0.864216
<i>Fasl</i>	2.13	0.289239	2.46	0.16419	1.16	0.692838
<i>Foxp3</i>	-1.11	0.995684	1.07	0.679392	1.19	0.725564
<i>Gata3</i>	-1.6	0.640001	-1.7	0.379356	-1.06	0.811623
<i>H2-Q10</i>	-1.33	0.422194	11.44	0.172809	15.25	0.163106
<i>Ifnar1</i>	1.08	0.58143	1.06	0.707629	-1.02	0.979097
<i>Ifngr1</i>	1.39	0.300099	-1.49	0.086573	-2.07	0.076628
<i>Il18</i>	-1.22	0.400888	-1.09	0.938618	1.12	0.518727
<i>Il2</i>	-1.1	0.681795	1.21	0.617857	1.32	0.399063
<i>Il4</i>	1.1	0.850322	1.23	0.572083	1.12	0.645832
<i>Il5</i>	-1.14	0.444136	-1.84	0.0646	-1.6	0.110326
<i>Irak1</i>	-1.26	0.428542	-1	0.888859	1.25	0.407765
<i>Irf3</i>	1.07	0.825579	1.1	0.705157	1.02	0.844627
<i>Ly96</i>	1.91	0.163368	3.5	0.096499	1.83	0.181165

<i>Lyz2</i>	-1.05	0.836131	-1.13	0.640551	-1.07	0.764977
<i>Mapk1</i>	1.09	0.908832	1.1	0.978388	1.01	0.823333
<i>Mapk8</i>	-1.23	0.39928	-1.22	0.443913	1.01	0.946208
<i>Mbl2</i>	-1.1	0.681795	1.18	0.634331	1.29	0.41576
<i>Mpo</i>	-1.06	0.599446	1.48	0.542214	1.56	0.289215
<i>Nfkbia</i>	4.21	0.077436	2.78	0.08867	-1.52	0.449863
<i>Nod1</i>	1.45	0.443541	1.79	0.21366	1.23	0.707567
<i>Rag1</i>	-3.25	0.358134	-2.89	0.358978	1.13	0.848791
<i>Rorc</i>	-1.03	0.649484	1.1	0.727201	1.13	0.693618
<i>Stat4</i>	1.36	0.278205	1.17	0.500363	-1.16	0.923067
<i>Stat6</i>	-1.34	0.230186	-1.58	0.088741	-1.18	0.318688
<i>Tbx21</i>	1.25	0.361167	1.56	0.080417	1.25	0.530412
<i>Ticam1</i>	-1.15	0.919751	-1.41	0.385692	-1.22	0.384671
<i>Tlr1</i>	1.75	0.629	1.19	0.853545	-1.47	0.111512
<i>Tlr6</i>	2.45	0.104283	1.7	0.371744	-1.44	0.22099
<i>Tlr7</i>	1.38	0.264071	1.63	0.176654	1.18	0.488009
<i>Tlr9</i>	1.54	0.317272	2.17	0.142154	1.41	0.760335
<i>Traf6</i>	1.12	0.50961	-1.42	0.041702	-1.59	0.200091

^a Animals (n=4 per group) were challenged with 10⁷ CFU of Strain 1 or Strain 1861, or left unchallenged (“resting”). Lungs were harvested for RNA isolation at 6h post-challenge and immune response gene expression analysed using Mouse Innate and Adaptive Immune Responses RT² Profiler™ PCR Arrays. Significant changes in expression were considered to be fold-change ≥ 2 , $P < 0.05$. These are highlighted in bold.

^{b,c} Changes in gene expression in lungs from challenged animals relative to resting controls.

^d Changes in gene expression in lungs from animals challenged with strain 1861 relative to lungs from animals challenged with strain 1.

Table S2**Mouse Type I Interferon Response^a**

(i) Genes with significant fold-change in at least one comparison group

Gene symbol	1 v Resting ^b		1861 v Resting ^c		1861 v 1 ^d	
	fold-change	p-value	fold-change	p-value	fold-change	p-value
<i>Adar</i>	2.09	0.001694	3.6	0.013804	1.73	0.08305
<i>Bst2</i>	-3.49	0.494485	2.26	0.053515	7.89	0.038312
<i>Casp1</i>	2.45	0.086648	5.38	0.028155	2.19	0.092263
<i>Ccl2</i>	102.86	0.000023	421.53	0.001627	4.1	0.006165
<i>Ccl4</i>	205.36	0.003604	817.17	0.000009	3.98	0.000208
<i>Ccl5</i>	2.75	0.04857	2.88	0.024565	1.05	0.918016
<i>Cd69</i>	4.69	0.008531	16.85	0.048602	3.59	0.087165
<i>Cd80</i>	21.59	0.023778	24.29	0.000271	1.13	0.909426
<i>Cd86</i>	4.07	0.028551	5.98	0.005524	1.47	0.284102
<i>Crp</i>	2.23	0.200209	10.53	0.00982	4.73	0.029543
<i>Cxcl10</i>	1490.93	0.017102	5770.58	0.004618	3.87	0.022306
<i>Ddx58</i>	3.1	0.000535	6.21	0.00051	2	0.008175
<i>Eif2ak2</i>	3.94	0.000392	16.62	0.000085	4.22	0.000286
<i>Gbp1</i>	8.95	0.000086	29.33	0.000025	3.28	0.000217
<i>H2-D1</i>	1.69	0.137651	2.22	0.047964	1.31	0.355881
<i>H2-K1</i>	-1.15	0.390231	2.22	0.014171	2.55	0.006709
<i>H2-M10.1</i>	1.69	0.137651	2.22	0.047964	1.31	0.355881
<i>H2-M3</i>	1.48	0.229106	2.78	0.002056	1.88	0.029088
<i>Ifi204</i>	7.78	0.010679	18.82	0.000565	2.42	0.018512
<i>Ifih1</i>	4.69	0.000283	20.39	0.006352	4.35	0.015216
<i>Ifit1</i>	24.37	0.000912	77.82	0.002493	3.19	0.014211

<i>Ifit2</i>	21.25	0.000124	105.02	0.000146	4.94	0.000529
<i>Ifit3</i>	3.09	0.000625	9.22	0.001351	2.98	0.00563
<i>Ifitm1</i>	4.21	0.000394	8.56	0.004066	2.03	0.038504
<i>Ifitm2</i>	1.95	0.009609	3.52	0.003333	1.81	0.026066
<i>Ifitm3</i>	2.65	0.000106	4.68	0.000043	1.77	0.000625
<i>Ifna2</i>	5.99	0.016795	17.26	0.016971	2.88	0.068768
<i>Ifna4</i>	7.94	0.006256	9.3	0.147022	1.17	0.513417
<i>Ifnar2</i>	1.84	0.031686	2.32	0.001468	1.26	0.275451
<i>Ifnb1</i>	66	0.03473	106.12	0.032259	1.61	0.39231
<i>Ifne</i>	1.69	0.137651	2.22	0.047964	1.31	0.355881
<i>Ifnz</i>	1.77	0.095132	2.22	0.047964	1.25	0.393239
<i>Il10</i>	7.23	0.000609	14.85	0.000541	2.05	0.015007
<i>Il15</i>	2.7	0.006081	9.95	0.000014	3.69	0.000102
<i>Il6</i>	229.84	0.022042	256.8	0.000091	1.12	0.907939
<i>Irf1</i>	5.33	0.000067	11.59	0.000303	2.17	0.005212
<i>Irf2</i>	1.89	0.023468	3.32	0.00161	1.75	0.015338
<i>Irf5</i>	4.16	0.011652	3.19	0.098134	-1.3	0.937401
<i>Irf7</i>	7.32	0.002524	19.83	0.000105	2.71	0.002391
<i>Irf9</i>	2.91	0.001813	5.28	0.000646	1.81	0.00877
<i>Isg15</i>	26.3	0.001784	110.24	0.00153	4.19	0.00635
<i>Isg20</i>	3.21	0.000065	7.31	0.00019	2.27	0.001934
<i>Jak1</i>	1.84	0.025349	3.06	0.00515	1.66	0.021711
<i>Jak2</i>	3.07	0.004525	5.21	0.000015	1.7	0.009038
<i>Mx1</i>	24.08	0.03047	67.74	0.000091	2.81	0.024421
<i>Mx2</i>	14.12	0.000315	34.05	0.006458	2.41	0.04558
<i>Myd88</i>	3.62	0.047628	3.01	0.087493	-1.2	0.825569
<i>Nos2</i>	1.57	0.023266	4.32	0.009201	2.76	0.019864

<i>Oas1a</i>	5.59	0.000632	18.76	0.000012	3.36	0.000126
<i>Oas1b</i>	3.51	0.098534	13.73	0.013932	3.92	0.060844
<i>Oas2</i>	4.16	0.000000	7.9	0.005297	1.9	0.049354
<i>Pml</i>	1.82	0.057354	3.49	0.000146	1.92	0.018254
<i>Psme2</i>	2.26	0.039652	5.88	0.003546	2.6	0.019732
<i>Socs1</i>	23.26	0.073031	98.5	0.010876	4.24	0.052315
<i>Stat1</i>	3.1	0.043775	10.02	0.000169	3.23	0.003154
<i>Stat2</i>	3.38	0.022449	8.98	0.000073	2.66	0.003261
<i>Stat3</i>	2.8	0.003943	4.01	0.00001	1.43	0.031599
<i>Tap1</i>	5.37	0.000183	8.48	0.000278	1.58	0.029406
<i>Timp1</i>	25.32	0.001053	63.21	0.014784	2.5	0.078742
<i>Tlr3</i>	1.48	0.123601	2.71	0.00243	1.83	0.015348
<i>Tlr8</i>	2.01	0.040173	2.29	0.01375	1.14	0.600687
<i>Traf3</i>	1.24	0.239088	-1.71	0.005748	-2.13	0.025507
<i>Tyk2</i>	-1.39	0.047608	-2.01	0.011672	-1.45	0.113686

(ii) Genes with no significant fold-changes in any comparison group

Gene symbol	1 v Resting ^b		1861 v Resting ^c		1861 v 1 ^d	
	fold-change	p-value	fold-change	p-value	fold-change	p-value
<i>Bag3</i>	-1.33	0.305242	1.29	0.369599	1.72	0.095586
<i>Cav1</i>	-1.28	0.553136	-1.57	0.198045	-1.22	0.373188
<i>Cd70</i>	1.94	0.284339	1.84	0.322525	-1.06	0.628119
<i>Cdkn1b</i>	-1.49	0.174182	-1.38	0.124661	1.08	0.863391
<i>Ciita</i>	-1.08	0.800801	1.12	0.435408	1.21	0.836752
<i>H2-Bl</i>	-1.35	0.115592	-1.26	0.323271	1.07	0.627968
<i>H2-T10</i>	-2.26	0.362928	9.86	0.234151	22.28	0.188749
<i>Ifi30</i>	1.75	0.196318	1.23	0.85751	-1.42	0.031016
<i>Ifnar1</i>	1.13	0.332325	-1	0.967456	-1.13	0.412895
<i>Irf3</i>	-1.06	0.979114	1.07	0.741029	1.13	0.75859
<i>Mal</i>	1.22	0.379471	-1.04	0.803365	-1.26	0.736138
<i>Met</i>	-1.1	0.620865	-1.62	0.04001	-1.47	0.05535
<i>Nmi</i>	1.52	0.204057	3.14	0.0633	2.07	0.118295
<i>Prkcz</i>	-1.14	0.529683	-1.69	0.116947	-1.48	0.152733
<i>Shb</i>	1.7	0.045891	1.75	0.012511	1.03	0.933661
<i>Sh2d1a</i>	-1.6	0.383735	-1.61	0.402283	-1	0.827181
<i>Ticam1</i>	1.09	0.722986	-1.67	0.154694	-1.82	0.149367
<i>Tlr7</i>	1.37	0.19618	1.34	0.195115	-1.02	0.876122
<i>Tlr9</i>	-1.27	0.621398	-1.41	0.591035	-1.11	0.913773
<i>Tnfsf10</i>	1.04	0.833337	1.46	0.052335	1.41	0.108623
<i>Vegfa</i>	1.08	0.802504	-1.2	0.354747	-1.29	0.236168

^a Animals (n=4 per group) were challenged with 10⁷ CFU of Strain 1 or Strain 1861, or left unchallenged (“resting”). Lungs were harvested for RNA isolation at 6h post-challenge and

immune response gene expression analysed using Mouse Type I Interferon Response RT² Profiler™ PCR Arrays. Significant changes in expression were considered to be fold-change ≥ 2 , $P < 0.05$. These are highlighted in bold.

^{b,c} Changes in gene expression in lungs from challenged animals relative to resting controls.

^d Changes in gene expression in lungs from animals challenged with strain 1861 relative to lungs from animals challenged with strain 1.

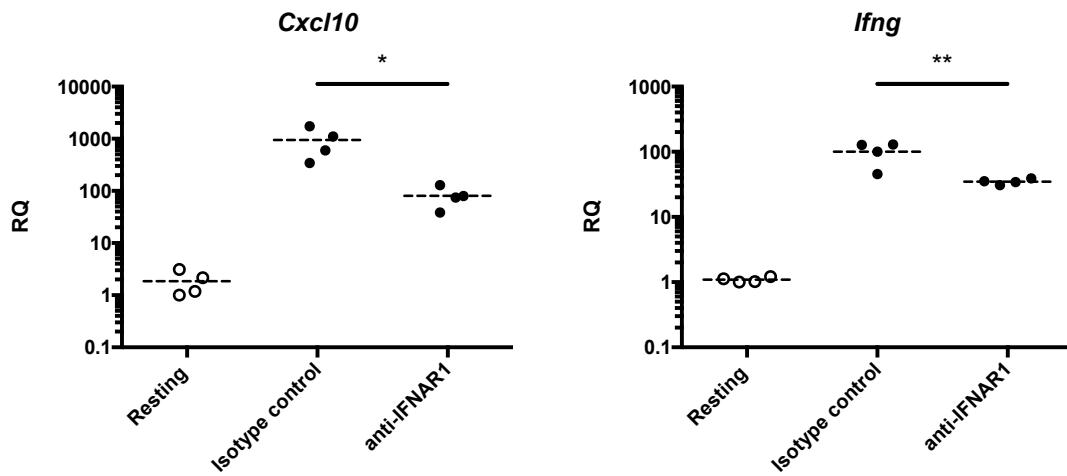


Figure S1. Confirming suppression of IFN-I response by measurement of IFN-I responsive gene expression. *Cxcl10* and *Ifng* expression was determined by qRT-PCR, comparing mRNA from lungs of strain 1861-infected mice at 6 h post challenge (filled circles) treated with either the isotype control or anti-IFNAR1 antibody, relative to an uninfected resting control group (open circles). A statistically significant difference in relative expression between isotype-treated and anti-IFNAR1 antibody-treated groups was determined by one-way ANOVA with Tukey's multiple comparison test, * = $P < 0.05$, ** = $P < 0.01$.