

Supplementary Table S1. Gene ontology terms significantly enriched ($P<0.05$, $FC>2$) in the proximal small intestine (ANTI vs. CON).FDR, false discovery rate.

#	GO term	Description	Number in input list	Number in BG/Ref	p-value	FDR
1	GO:0034641	cellular nitrogen compound metabolic process	32	264	3.80E-09	8.10E-06
2	GO:0010876	lipid localization	7	11	2.10E-08	2.30E-05
3	GO:0002455	humoral immune response mediated by circulating immunoglobulin	9	33	1.70E-06	0.00071
4	GO:0002526	acute inflammatory response	13	71	1.30E-06	0.00071
5	GO:0006958	complement activation, classical pathway	9	33	1.70E-06	0.00071
6	GO:0070887	cellular response to chemical stimulus	16	110	2.10E-06	0.00077
7	GO:0045087	innate immune response	13	77	3.40E-06	0.001
8	GO:0009605	response to external stimulus	37	454	5.80E-06	0.0016
9	GO:0006954	inflammatory response	21	193	7.70E-06	0.0018
10	GO:0009611	response to wounding	27	294	1.10E-05	0.0024
11	GO:0006956	complement activation	9	43	1.70E-05	0.0031
12	GO:0002541	activation of plasma proteins involved in acute inflammatory response	9	43	1.70E-05	0.0031
13	GO:0006629	lipid metabolic process	38	501	2.20E-05	0.0036
14	GO:0006952	defense response	29	342	2.50E-05	0.0038
15	GO:0006631	fatty acid metabolic process	15	128	5.90E-05	0.0084
16	GO:0002253	activation of immune response	10	62	6.50E-05	0.0088
17	GO:0051605	protein maturation by peptide bond cleavage	9	52	8.50E-05	0.011
18	GO:0019724	B cell mediated immunity	9	53	9.90E-05	0.011
19	GO:0016064	immunoglobulin mediated immune response	9	53	9.90E-05	0.011
20	GO:0006959	humoral immune response	9	55	0.00013	0.014
21	GO:0006805	xenobiotic metabolic process	8	47	0.00023	0.022
22	GO:0050778	positive regulation of immune response	10	72	0.00024	0.022
23	GO:0002682	regulation of immune system process	15	145	0.00024	0.022
24	GO:0002250	adaptive immune response	9	61	0.0003	0.026
25	GO:0002460	adaptive immune response based on somatic recombination of immune receptors built from immunoglobulin superfamily domains	9	61	0.0003	0.026
26	GO:0050776	regulation of immune response	11	89	0.00033	0.027
27	GO:0002449	lymphocyte mediated immunity	9	62	0.00034	0.027
28	GO:0009410	response to xenobiotic stimulus	8	51	0.00042	0.031
29	GO:0032787	monocarboxylic acid metabolic process	21	255	0.00041	0.031
30	GO:0002443	leukocyte mediated immunity	9	65	0.00048	0.035
31	GO:0006950	response to stress	52	881	0.00054	0.038
32	GO:0033559	unsaturated fatty acid metabolic process	6	31	0.00069	0.046
33	GO:0004497	monooxygenase activity	11	45	4.00E-07	0.00019
34	GO:0046906	tetrapyrrole binding	14	91	4.50E-06	0.0011
35	GO:0016705	oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen	11	61	9.70E-06	0.0015
36	GO:0020037	heme binding	12	86	5.60E-05	0.0065
37	GO:0016627	oxidoreductase activity, acting on the CH-CH group of donors	8	40	7.10E-05	0.0066
38	GO:0003995	acyl-CoA dehydrogenase activity	5	15	0.00013	0.0083
39	GO:0016491	oxidoreductase activity	33	448	0.00012	0.0083
40	GO:0016853	isomerase activity	11	83	0.00018	0.01

