

Phyla with interactions at 3.5 weeks	Within A/J			Within BALB/c			Within C57BL/6		
	HSD relative to Jax			HSD relative to Jax			HSD relative to Jax		
Phylum	logFC	P.Value	adj.P.Val	logFC	P.Value	adj.P.Val	logFC	P.Value	adj.P.Val
<i>Deferribacteres</i>	2.611791	0.00238	0.00238	-1.11316	0.29728	0.44592	-0.50667	0.560694	0.835016
<i>Proteobacteria</i>	3.586889	5.48E-07	1.64E-06	4.30041	1.11E-06	3.33E-06	1.16702	0.051855	0.155565
<i>Verrucomicrobia</i>	-2.99403	0.000142	0.000213	-0.01302	0.986226	0.986226	0.122861	0.835016	0.835016
Phylum	A/J relative to BALB/c			C57BL/6 relative to A/J			C57BL/6 relative to BALB/c		
	logFC	P.Value	adj.P.Val	logFC	P.Value	adj.P.Val	logFC	P.Value	adj.P.Val
<i>Deferribacteres</i>	2.109992	0.045021	0.135064	-1.14806	0.190241	0.216834	0.961928	0.368812	0.890817
<i>Proteobacteria</i>	-0.6366	0.377639	0.377639	0.735225	0.216834	0.216834	0.098621	0.890817	0.890817
<i>Verrucomicrobia</i>	-1.27982	0.107879	0.161818	1.583652	0.032274	0.096822	0.303836	0.667281	0.890817
Phylum	A/J relative to BALB/c			C57BL/6 relative to A/J			C57BL/6 relative to BALB/c		
	logFC	P.Value	adj.P.Val	logFC	P.Value	adj.P.Val	logFC	P.Value	adj.P.Val
<i>Deferribacteres</i>	-1.61496	0.060751	0.091127	1.970396	0.017926	0.017926	0.355433	0.683335	0.795138
<i>Proteobacteria</i>	0.076917	0.904401	0.904401	3.155093	3.33E-06	9.98E-06	3.232011	7.31E-06	2.19E-05
<i>Verrucomicrobia</i>	1.701194	0.016537	0.049611	-1.53324	0.012735	0.017926	0.167957	0.795138	0.795138

Phyla with interactions at 7.5 weeks	Within A/J			Within BALB/c			Within C57BL/6		
	HSD relative to Jax			HSD relative to Jax			HSD relative to Jax		
Phylum	logFC	P.Value	adj.P.Val	logFC	P.Value	adj.P.Val	logFC	P.Value	adj.P.Val
<i>Bacteroidetes</i>	-0.65153	0.046416	0.185664	-0.42808	0.288243	0.288243	-1.78642	0.000377	0.000753
<i>Proteobacteria</i>	-0.74012	0.275543	0.435756	-1.28991	0.131653	0.175537	-4.33494	6.11E-05	0.000245
<i>Tenericutes</i>	-0.48148	0.326817	0.435756	1.179563	0.058896	0.117793	1.671782	0.022759	0.030345
<i>Verrucomicrobia</i>	0.282622	0.67599	0.67599	-3.13391	0.000371	0.001482	0.51888	0.583066	0.583066
Phylum	A/J relative to BALB/c			C57BL/6 relative to A/J			C57BL/6 relative to BALB/c		
	logFC	P.Value	adj.P.Val	logFC	P.Value	adj.P.Val	logFC	P.Value	adj.P.Val
<i>Bacteroidetes</i>	0.175955	0.517141	0.517141	-0.87547	0.009142	0.018284	-0.69952	0.02659	0.035453
<i>Proteobacteria</i>	0.942912	0.104109	0.416437	-3.07649	4.27E-05	0.000171	-2.13358	0.001821	0.007285
<i>Tenericutes</i>	-0.43596	0.295244	0.517141	0.958093	0.05707	0.076094	0.522136	0.268216	0.268216
<i>Verrucomicrobia</i>	0.378574	0.500041	0.517141	1.109539	0.089275	0.089275	1.488113	0.019123	0.035453
Phylum	A/J relative to BALB/c			C57BL/6 relative to A/J			C57BL/6 relative to BALB/c		
	logFC	P.Value	adj.P.Val	logFC	P.Value	adj.P.Val	logFC	P.Value	adj.P.Val
<i>Bacteroidetes</i>	0.399405	0.193834	0.258445	0.259423	0.36047	0.385971	0.658828	0.024156	0.048313
<i>Proteobacteria</i>	0.393122	0.54111	0.54111	0.518329	0.385971	0.385971	0.911451	0.132632	0.176843
<i>Tenericutes</i>	1.225088	0.011151	0.022301	-1.19517	0.007819	0.031277	0.029918	0.944961	0.944961
<i>Verrucomicrobia</i>	-3.03796	7.35E-06	2.94E-05	0.873281	0.142166	0.284332	-2.16468	6.1E-05	0.000244

Phyla with interactions at 10.5 weeks	Within A/J			Within BALB/c			Within C57BL/6		
	HSD relative to Jax			HSD relative to Jax			HSD relative to Jax		
Phylum	logFC	P.Value	adj.P.Val	logFC	P.Value	adj.P.Val	logFC	P.Value	adj.P.Val
<i>Cyanobacteria</i>	0.304715	0.713057	0.714692	2.122697	0.013111	0.019666	3.744766	1.8E-05	1.8E-05
<i>Deferribacteres</i>	8.363844	3.08E-16	9.24E-16	4.468571	8.3E-05	0.000249	6.159187	1.26E-09	3.78E-09
<i>Verrucomicrobia</i>	-0.40903	0.714692	0.714692	0.737518	0.546507	0.546507	5.566851	4.69E-06	7.04E-06
Phylum	A/J relative to BALB/c			C57BL/6 relative to A/J			C57BL/6 relative to BALB/c		
	logFC	P.Value	adj.P.Val	logFC	P.Value	adj.P.Val	logFC	P.Value	adj.P.Val
<i>Cyanobacteria</i>	-1.71962	0.043463	0.065194	1.176648	0.160507	0.160507	-0.54297	0.507971	0.507971
<i>Deferribacteres</i>	4.038477	1.62E-05	4.87E-05	-2.23053	0.013467	0.0202	1.807951	0.038946	0.058418
<i>Verrucomicrobia</i>	-0.7268	0.540282	0.540282	5.915911	9.29E-07	2.79E-06	5.189114	1.32E-05	3.97E-05
Phylum	A/J relative to BALB/c			C57BL/6 relative to A/J			C57BL/6 relative to BALB/c		
	logFC	P.Value	adj.P.Val	logFC	P.Value	adj.P.Val	logFC	P.Value	adj.P.Val
<i>Cyanobacteria</i>	0.098365	0.905498	0.905498	-2.2634	0.007804	0.023411	-2.16504	0.011389	0.034168
<i>Deferribacteres</i>	0.143204	0.89291	0.905498	-0.02587	0.977884	0.977884	0.117335	0.914069	0.914069
<i>Verrucomicrobia</i>	0.419747	0.716648	0.905498	-0.05997	0.957974	0.977884	0.35978	0.765898	0.914069

Table S1