arounla arounla	Amara	Within	Total
group1a-group2a SS	Among 0.176704	Within 2.11979	Total 2.2965
df	1	2.11979 18 0.117766	Total 2.2965 19
MS	0.176704	0.117766	
Fs: p-value: 0.183	1.50046		
group1b-group2b SS	0.0995619	1 91754	Total 2.01711
df	1	18	19
MS	0.0995619	0.10653	
Fs	0.934589		
p value: 0.44			
group1b group3b	Among	Within	Total
SS df	1	2.30859	19
MS	0.124857	0.128255	
Fs	0.973504		
p-value: 0.423			
group1b group4b		Within	Total
SS df	0.0856737	2.17826 18	2.26393
MS	0.0856737	18 0.121014	19
Fs	0.707962		
p-value: 0.708			
group1b-group5b	Among	Within	Total
SS df	0.113696	1.97407	2.08777
dt MS	0.113696	0.12338	17
Fs	0.921516		
Ps: p-value: 0.441	0.921516		
group1b-group6b	Amona	Within	Total
ss	0.223538	Within 2.14301 16	2.36654
df MS	0.223538	0.133938	17
Fs: p-value: 0.119	1.66896		
group2b-group3b SS	Among 0.0539685	Within 2.04744	Total 2.10141
df	1	18	19
MS	0.0539685	0.113747	
Fs: p-value: 0.877	0.474463		
p-value: 0.877			
group2b group4b SS	Among 0.226564	Within	Total
df .	0.236564		
MS	0.236564	0.106506	
Fs	2.22114		
p-value: 0.043			
group2b group5b	Among	Within 1.71292	Total
SS df	0.0727183	1.71292	1.78564
MS	0.0727183		
Fc	0.679246		
p value: 0.646	0.073230		
group2b group6b	Among	Within	Total
SS	0.289721	Within 1.88185	2.17157
df MS	0.289721	16 0.117616	17
Fs: p-value: 0.033	2.46328		
group3b-group4b SS	Among 0.275136	3 30015	Total 2.58329
df MS	1	18	19
	0273230	0.120232	
Fs: p-value: 0.056	2.14563		
group3b-group5b SS	Among 0.0737357	Within 2 10297	Total 2.1777
df	1	Within 2.10397 16 0.131498	17
MS	0.0737357	0.131498	
Fs	0.560737		
p-value: 0.779			
group3b-group6b	Among	Within	Total
SS df	0.296059	Within 2.2729 16 0.142056	2.56896
MS	0.296059	0.142056	3,
Fs	2.08409		
p value: 0.082			
group4b group5b	Among	Within	Total
ss	0.217601	1.97363	2.19124
df MS	0.217601	Within 1.97363 16 0.123352	17
Fs	1.76406		
Fs: p-value: 0.097	1.76406		
	Amona	Within	Tota!
group4b-group6b SS	Among 0.148816	Within 2.14257	2.29138
df MS	1	16	17
	0.148816	0.133911	
Fs: n.value: 0.374	1.11131		
p-value: 0.324			
group5b-group6b SS	Among 0.222487	Within 1.93838	Total 2.16087
df	0.222487	1.93838 14	216087
MS	0.222487	0.138456	
Fs	1.60692		
p value: 0.165	2.00072		

Supplemental Table S3: statistics using AMOVA (Bray-Curtis) of 16S amplicon-based microbiota analyses (beta-diversity) of fecal pellets from Active2-treated mice and controls. The statistical analyses indicate no significant difference of the intestinal commensal microbiota composition (beta-diversity) between groups before or after the experimental course. Animal groups 1 through 6 are numbered as outlined in Table 3; additional group designation a: fecal microbiota before start of experiment after acclimatization period; additional group designation b: fecal microbiota after experimental course. P values of the respective comparisons are shaded in blue (non-significantly different) or light orange (trend towards significance). Differences between all mouse groups before the experiments (a) were also not significant; only one pairwise comparison between groups 1a and 6a as one representative comparison is listed for the preexperimental status.