

Table S1: SCFA enzymes and corresponding KEGG ID analyzed.

KEGG IDs	Enzyme Name
K00929	Butyrate Kinase
K01034	Acetate CoA subunit A
K01035	Acetate CoA subunit B
K01908	Propionyl-CoA Synthetase
K01895	Acetyl-CoA Synthetase
K00932	Propionate Kinase
K19697	Propionate Kinase
K18372	Methyl Acetate Hydrolase
K00467	Lactate 2-Monooxygenase
K00156	Pyruvate Dehydrogenase
K00925	Acetate Kinase
K01512	Acylphosphatase
K01067	Acetyl-CoA Hydrolase
K18118	Succinyl-CoA:Acetate
K01026	Propionate CoA-Transferase
K01905	Acetate—CoA Ligase subunit A
K22224	Acetate—CoA Ligase subunit B
K01895	Acetyl-CoA Synthetase
K00128	Aldehyde Dehydrogenase
K14085	Aldehyde Dehydrogenase Family 7
K00149	Aldehyde Dehydrogenase Family 9
K00138	Aldehyde Dehydrogenase

Table S2: Breakdown of Kruskal-Wallis tests using PICRUSt imputed relative abundance of select genes in SCFA pathways.

KEGG IDs	Rank Sum	Statistic	P-value	BH
K00929	0.102		0.950	0.997
K01026	0.058		0.971	0.997
K00467	0.054		0.973	0.997
K01908	0.053		0.974	0.997
K01035	0.049		0.976	0.997
K01905	0.042		0.979	0.997
K00128	0.032		0.984	0.997
K01512	0.030		0.985	0.997
K00156	0.025		0.988	0.997
K00925	0.024		0.988	0.997
K01067	0.024		0.988	0.997
K01895	0.023		0.988	0.997
K01034	0.005		0.997	0.997

Table S3: Breakdown of Wilcoxon rank-sum tests for pre- versus post-treatment of tumor using PICRUST imputed relative abundance of select genes in SCFA pathways.

KEGG IDs	Disease Group	Test Statistic	P-value	BH
K00128	Adenoma	172	0.940	1.000
K00128	Carcinoma	510	0.309	0.723
K00156	Adenoma	170	0.901	1.000
K00156	Carcinoma	513	0.291	0.723
K00467	Adenoma	169	0.881	1.000
K00467	Carcinoma	493	0.267	0.723
K00925	Adenoma	174	0.980	1.000
K00925	Carcinoma	511	0.303	0.723
K00929	Adenoma	176	1.000	1.000
K00929	Carcinoma	515	0.280	0.723
K01026	Adenoma	206	0.452	0.784
K01026	Carcinoma	496	0.404	0.750
K01034	Adenoma	171	0.920	1.000
K01034	Carcinoma	502	0.361	0.723
K01035	Adenoma	163	0.764	1.000
K01035	Carcinoma	504	0.348	0.723
K01067	Adenoma	169	0.881	1.000
K01067	Carcinoma	511	0.303	0.723
K01512	Adenoma	171	0.920	1.000
K01512	Carcinoma	508	0.322	0.723
K01895	Adenoma	170	0.901	1.000
K01895	Carcinoma	511	0.303	0.723
K01905	Adenoma	215	0.328	0.723
K01905	Carcinoma	504	0.348	0.723
K01908	Adenoma	169	0.881	1.000
K01908	Carcinoma	512	0.297	0.723

Table S4: Breakdown of Kruskal-Wallis tests using counts per million from metagenomic sequencing of select genes in SCFA pathways.

KEGG IDs	Rank Sum Statistic	P-value	BH
K00925	4.212	0.122	0.730
K00128	1.726	0.422	0.762
K01067	1.690	0.429	0.762
K01512	0.989	0.610	0.762
K00156	0.754	0.686	0.762
K00929	0.543	0.762	0.762

Table S5: Spearman tests between OTU relative abundance and SCFA concentrations.

OTU	Family	Genus	Group	SCFA	Rho	P-value	BH
Otu01613	Clostridiales	Clostridiales	adenoma	acetate	-0.288	2.12e-04	1.00e-02
Otu00037	Rikenellaceae	Rikenellaceae	adenoma	acetate	-0.279	3.32e-04	1.32e-02
Otu00184	Lachnospiraceae	Lachnospiraceae	adenoma	acetate	-0.274	4.29e-04	1.32e-02
Otu00207	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.273	4.48e-04	1.32e-02
Otu00220	Lachnospiraceae	Lachnospiraceae	adenoma	acetate	-0.273	4.53e-04	1.32e-02
Otu00232	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.281	3.08e-04	1.32e-02
Otu00253	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.272	4.82e-04	1.32e-02
Otu00790	Bacteria	Bacteria	adenoma	acetate	-0.274	4.38e-04	1.32e-02
Otu00842	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.273	4.67e-04	1.32e-02
Otu00602	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.268	5.82e-04	1.52e-02
Otu00001	Lachnospiraceae	Lachnospiraceae	adenoma	acetate	0.266	6.48e-04	1.61e-02
Otu00349	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.263	7.39e-04	1.68e-02
Otu00353	Bacteria	Bacteria	adenoma	acetate	-0.264	7.10e-04	1.68e-02
Otu00438	Lachnospiraceae	Lachnospiraceae	adenoma	acetate	-0.260	8.87e-04	1.85e-02
Otu00609	Clostridiales	Clostridiales	adenoma	acetate	-0.260	8.78e-04	1.85e-02
Otu00025	Lachnospiraceae	Lachnospiraceae	adenoma	acetate	0.258	9.72e-04	1.95e-02
Otu00316	Firmicutes	Firmicutes	adenoma	acetate	-0.257	1.02e-03	1.96e-02
Otu00094	Pasteurellaceae	Pasteurellaceae	adenoma	acetate	0.253	1.19e-03	2.21e-02
Otu00072	Lachnospiraceae	Lachnospiraceae	adenoma	acetate	-0.250	1.40e-03	2.52e-02
Otu00772	Lachnospiraceae	Lachnospiraceae	adenoma	acetate	-0.248	1.52e-03	2.65e-02
Otu00230	Lachnospiraceae	Lachnospiraceae	adenoma	acetate	-0.246	1.64e-03	2.76e-02
Otu00151	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.244	1.83e-03	2.99e-02
Otu00006	Bacteroidaceae	Bacteroidaceae	adenoma	acetate	-0.242	1.99e-03	3.12e-02
Otu00416	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.241	2.03e-03	3.12e-02
Otu00558	Lachnospiraceae	Lachnospiraceae	adenoma	acetate	-0.240	2.21e-03	3.29e-02
Otu00273	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.238	2.31e-03	3.35e-02
Otu00308	Firmicutes	Firmicutes	adenoma	acetate	-0.237	2.44e-03	3.35e-02
Otu00455	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.237	2.43e-03	3.35e-02
Otu00659	Firmicutes	Firmicutes	adenoma	acetate	-0.236	2.53e-03	3.39e-02
Otu00014	Lachnospiraceae	Lachnospiraceae	adenoma	acetate	0.232	3.01e-03	3.85e-02
Otu00260	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.230	3.33e-03	3.85e-02
Otu00436	Lachnospiraceae	Lachnospiraceae	adenoma	acetate	-0.231	3.20e-03	3.85e-02
Otu00545	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.231	3.15e-03	3.85e-02
Otu00597	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.232	3.03e-03	3.85e-02
Otu01089	Clostridiales	Clostridiales	adenoma	acetate	-0.230	3.39e-03	3.85e-02
Otu01114	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.231	3.25e-03	3.85e-02
Otu00009	Lachnospiraceae	Lachnospiraceae	adenoma	acetate	0.228	3.69e-03	4.10e-02
Otu00254	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.226	3.96e-03	4.30e-02
Otu00100	Bacteroidaceae	Bacteroidaceae	adenoma	acetate	-0.222	4.71e-03	4.35e-02
Otu00133	Lachnospiraceae	Lachnospiraceae	adenoma	acetate	-0.221	4.76e-03	4.35e-02
Otu00148	Lachnospiraceae	Lachnospiraceae	adenoma	acetate	0.224	4.29e-03	4.35e-02

OTU	Family	Genus	Group	SCFA	Rho	P-value	BH
Otu00251	Porphyromonadaceae	Porphyromonadaceae	adenoma	acetate	-0.223	4.41e-03	4.35e-02
Otu00371	Firmicutes	Firmicutes	adenoma	acetate	-0.221	4.89e-03	4.35e-02
Otu00502	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.221	4.92e-03	4.35e-02
Otu00562	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.222	4.67e-03	4.35e-02
Otu00606	Oxalobacteraceae	Oxalobacteraceae	adenoma	acetate	-0.225	4.13e-03	4.35e-02
Otu00690	Clostridiales	Clostridiales	adenoma	acetate	-0.221	4.90e-03	4.35e-02
Otu00845	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.223	4.51e-03	4.35e-02
Otu00987	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.223	4.54e-03	4.35e-02
Otu00203	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.218	5.47e-03	4.76e-02
Otu00747	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.217	5.64e-03	4.81e-02
Otu00844	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.217	5.72e-03	4.81e-02
Otu00043	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.320	3.48e-05	5.41e-03
Otu00049	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	0.314	5.07e-05	5.41e-03
Otu00167	Clostridiales	Clostridiales	adenoma	acetate	0.317	4.23e-05	5.41e-03
Otu00536	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.313	5.18e-05	5.41e-03
Otu00709	Clostridiales	Clostridiales	adenoma	acetate	-0.318	3.88e-05	5.41e-03
Otu00594	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.308	6.94e-05	6.04e-03
Otu00492	Clostridiales	Clostridiales	adenoma	acetate	-0.305	8.16e-05	6.08e-03
Otu00162	Clostridiales	Clostridiales	adenoma	acetate	-0.301	1.04e-04	6.79e-03
Otu00179	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	-0.292	1.67e-04	9.68e-03
Otu01093	Clostridiales	Clostridiales	adenoma	acetate	-0.290	1.85e-04	9.68e-03
Otu00043	Ruminococcaceae	Ruminococcaceae	normal	acetate	-0.284	1.79e-04	3.11e-02
Otu00693	Proteobacteria	Proteobacteria	normal	acetate	-0.289	1.29e-04	3.11e-02
Otu00435	Ruminococcaceae	Ruminococcaceae	normal	acetate	-0.264	5.09e-04	3.96e-02
Otu00482	Lachnospiraceae	Lachnospiraceae	normal	acetate	-0.273	3.08e-04	3.96e-02
Otu00594	Ruminococcaceae	Ruminococcaceae	normal	acetate	-0.263	5.31e-04	3.96e-02
Otu00728	Ruminococcaceae	Ruminococcaceae	normal	acetate	-0.265	4.85e-04	3.96e-02
Otu00001	Lachnospiraceae	Lachnospiraceae	normal	acetate	0.335	8.19e-06	4.27e-03
Otu00435	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.263	7.49e-04	1.03e-02
Otu00659	Firmicutes	Firmicutes	adenoma	butyrate	-0.342	9.00e-06	1.17e-03
Otu00207	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.259	9.02e-04	1.21e-02
Otu00162	Clostridiales	Clostridiales	adenoma	butyrate	-0.393	2.44e-07	1.27e-04
Otu00037	Rikenellaceae	Rikenellaceae	adenoma	butyrate	-0.256	1.03e-03	1.30e-02
Otu00107	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	0.256	1.04e-03	1.30e-02
Otu00772	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	-0.257	9.98e-04	1.30e-02
Otu00009	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	0.254	1.13e-03	1.33e-02
Otu00184	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	-0.255	1.10e-03	1.33e-02
Otu00747	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.254	1.14e-03	1.33e-02
Otu00401	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.253	1.22e-03	1.38e-02
Otu00416	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.251	1.29e-03	1.41e-02
Otu00987	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.251	1.30e-03	1.41e-02
Otu00046	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	0.248	1.49e-03	1.53e-02
Otu00148	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	0.248	1.49e-03	1.53e-02

OTU	Family	Genus	Group	SCFA	Rho	P-value	BH
Otu00609	Clostridiales	Clostridiales	adenoma	butyrate	-0.248	1.50e-03	1.53e-02
Otu00597	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.334	1.52e-05	1.59e-03
Otu00232	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.247	1.62e-03	1.63e-02
Otu00581	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.245	1.77e-03	1.74e-02
Otu00371	Firmicutes	Firmicutes	adenoma	butyrate	-0.328	2.14e-05	1.86e-03
Otu00594	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.326	2.49e-05	1.86e-03
Otu00203	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.323	2.86e-05	1.87e-03
Otu01019	Clostridiales	Clostridiales	adenoma	butyrate	-0.241	2.03e-03	1.97e-02
Otu00277	Rikenellaceae	Rikenellaceae	adenoma	butyrate	-0.239	2.22e-03	2.10e-02
Otu00382	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.238	2.37e-03	2.21e-02
Otu00005	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	0.316	4.43e-05	2.22e-03
Otu00308	Firmicutes	Firmicutes	adenoma	butyrate	-0.315	4.67e-05	2.22e-03
Otu00709	Clostridiales	Clostridiales	adenoma	butyrate	-0.318	3.92e-05	2.22e-03
Otu00043	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.313	5.17e-05	2.23e-03
Otu00094	Pasteurellaceae	Pasteurellaceae	adenoma	butyrate	0.312	5.55e-05	2.23e-03
Otu00438	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	-0.310	6.13e-05	2.29e-03
Otu00522	Firmicutes	Firmicutes	adenoma	butyrate	-0.236	2.55e-03	2.31e-02
Otu00844	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.236	2.57e-03	2.31e-02
Otu00492	Clostridiales	Clostridiales	adenoma	butyrate	-0.309	6.74e-05	2.34e-03
Otu00625	Bacteria	Bacteria	adenoma	butyrate	-0.234	2.78e-03	2.46e-02
Otu00151	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.234	2.86e-03	2.48e-02
Otu00404	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	-0.233	2.89e-03	2.48e-02
Otu00558	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	-0.230	3.30e-03	2.78e-02
Otu00254	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.304	8.60e-05	2.80e-03
Otu00026	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	0.229	3.41e-03	2.83e-02
Otu01055	Erysipelotrichaceae	Erysipelotrichaceae	adenoma	butyrate	-0.228	3.56e-03	2.90e-02
Otu00013	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	0.228	3.68e-03	2.96e-02
Otu00049	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	0.302	1.01e-04	3.11e-03
Otu00007	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	0.298	1.25e-04	3.49e-03
Otu00253	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.297	1.27e-04	3.49e-03
Otu00179	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.296	1.41e-04	3.50e-03
Otu00316	Firmicutes	Firmicutes	adenoma	butyrate	-0.296	1.38e-04	3.50e-03
Otu01100	Firmicutes	Firmicutes	adenoma	butyrate	-0.223	4.47e-03	3.53e-02
Otu00323	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.222	4.61e-03	3.59e-02
Otu00591	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	-0.220	4.95e-03	3.80e-02
Otu00536	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.293	1.63e-04	3.80e-03
Otu00811	Clostridiales	Clostridiales	adenoma	butyrate	-0.292	1.68e-04	3.80e-03
Otu00415	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.220	5.10e-03	3.83e-02
Otu00429	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	0.220	5.14e-03	3.83e-02
Otu01456	Clostridiales	Clostridiales	adenoma	butyrate	-0.291	1.81e-04	3.95e-03
Otu00282	Clostridiales	Clostridiales	adenoma	butyrate	-0.290	1.92e-04	4.01e-03
Otu00893	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.217	5.78e-03	4.25e-02
Otu01228	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.215	6.13e-03	4.44e-02

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Otu00188	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	0.214	6.35e-03	4.50e-02
Otu00585	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	-0.214	6.37e-03	4.50e-02
Otu00455	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.212	6.81e-03	4.74e-02
Otu01114	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.286	2.37e-04	4.77e-03
Otu01093	Clostridiales	Clostridiales	adenoma	butyrate	-0.284	2.66e-04	5.14e-03
Otu00167	Clostridiales	Clostridiales	adenoma	butyrate	0.282	2.90e-04	5.24e-03
Otu00251	Porphyromonadaceae	Porphyromonadaceae	adenoma	butyrate	-0.282	2.91e-04	5.24e-03
Otu00014	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	0.278	3.49e-04	6.08e-03
Otu00349	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.272	4.71e-04	7.48e-03
Otu00657	Clostridia	Clostridia	adenoma	butyrate	-0.274	4.46e-04	7.48e-03
Otu01613	Clostridiales	Clostridiales	adenoma	butyrate	-0.272	4.73e-04	7.48e-03
Otu00220	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	-0.271	5.09e-04	7.82e-03
Otu00001	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	0.270	5.32e-04	7.93e-03
Otu00230	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	-0.269	5.61e-04	8.14e-03
Otu00842	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.356	3.46e-06	9.03e-04
Otu00602	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	-0.350	5.36e-06	9.33e-04
Otu00690	Clostridiales	Clostridiales	adenoma	butyrate	-0.265	6.79e-04	9.58e-03
Otu00074	Lachnospiraceae	Lachnospiraceae	cancer	butyrate	0.382	1.34e-04	4.05e-02
Otu00107	Lachnospiraceae	Lachnospiraceae	cancer	butyrate	0.379	1.55e-04	4.05e-02
Otu00148	Lachnospiraceae	Lachnospiraceae	cancer	butyrate	0.367	2.56e-04	4.45e-02
Otu00107	Lachnospiraceae	Lachnospiraceae	normal	butyrate	0.287	1.48e-04	2.46e-02
Otu00254	Ruminococcaceae	Ruminococcaceae	normal	butyrate	-0.269	3.92e-04	2.46e-02
Otu00392	Firmicutes	Firmicutes	normal	butyrate	-0.277	2.50e-04	2.46e-02
Otu00416	Ruminococcaceae	Ruminococcaceae	normal	butyrate	-0.275	2.90e-04	2.46e-02
Otu00482	Lachnospiraceae	Lachnospiraceae	normal	butyrate	-0.267	4.24e-04	2.46e-02
Otu00594	Ruminococcaceae	Ruminococcaceae	normal	butyrate	-0.285	1.61e-04	2.46e-02
Otu00625	Bacteria	Bacteria	normal	butyrate	-0.275	2.83e-04	2.46e-02
Otu00811	Clostridiales	Clostridiales	normal	butyrate	-0.272	3.34e-04	2.46e-02
Otu00452	Ruminococcaceae	Ruminococcaceae	normal	butyrate	-0.264	4.95e-04	2.58e-02
Otu00007	Ruminococcaceae	Ruminococcaceae	normal	butyrate	0.257	7.24e-04	2.91e-02
Otu00037	Rikenellaceae	Rikenellaceae	normal	butyrate	-0.258	6.74e-04	2.91e-02
Otu00334	Clostridiales	Clostridiales	normal	butyrate	-0.259	6.62e-04	2.91e-02
Otu00659	Firmicutes	Firmicutes	normal	butyrate	-0.251	9.84e-04	3.63e-02
Otu00746	Ruminococcaceae	Ruminococcaceae	normal	butyrate	-0.249	1.04e-03	3.63e-02
Otu01114	Ruminococcaceae	Ruminococcaceae	normal	butyrate	-0.247	1.15e-03	3.75e-02
Otu00001	Lachnospiraceae	Lachnospiraceae	normal	butyrate	0.240	1.62e-03	4.78e-02
Otu00435	Ruminococcaceae	Ruminococcaceae	normal	butyrate	-0.240	1.65e-03	4.78e-02
Otu00728	Ruminococcaceae	Ruminococcaceae	normal	butyrate	-0.325	1.54e-05	8.03e-03
Otu00435	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.268	5.96e-04	1.04e-02
Otu00562	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.264	7.05e-04	1.18e-02
Otu00987	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.264	7.26e-04	1.18e-02
Otu01613	Clostridiales	Clostridiales	adenoma	propionate	-0.263	7.55e-04	1.19e-02
Otu00309	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.262	7.82e-04	1.20e-02

OTU	Family	Genus	Group	SCFA	Rho	P-value	BH
Otu00084	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.259	9.11e-04	1.33e-02
Otu00184	Lachnospiraceae	Lachnospiraceae	adenoma	propionate	-0.259	9.16e-04	1.33e-02
Otu00134	Actinomycetaceae	Actinomycetaceae	adenoma	propionate	0.255	1.11e-03	1.52e-02
Otu00799	Clostridiales	Clostridiales	adenoma	propionate	-0.255	1.08e-03	1.52e-02
Otu00321	Bacteroidaceae	Bacteroidaceae	adenoma	propionate	-0.253	1.19e-03	1.53e-02
Otu00382	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.254	1.17e-03	1.53e-02
Otu00536	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.252	1.23e-03	1.53e-02
Otu01456	Clostridiales	Clostridiales	adenoma	propionate	-0.253	1.22e-03	1.53e-02
Otu00507	Acidaminococcaceae	Acidaminococcaceae	adenoma	propionate	-0.251	1.29e-03	1.57e-02
Otu00316	Firmicutes	Firmicutes	adenoma	propionate	-0.251	1.33e-03	1.57e-02
Otu00416	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.250	1.40e-03	1.63e-02
Otu00251	Porphyromonadaceae	Porphyromonadaceae	adenoma	propionate	-0.328	2.15e-05	1.79e-03
Otu00609	Clostridiales	Clostridiales	adenoma	propionate	-0.326	2.40e-05	1.79e-03
Otu00203	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.246	1.63e-03	1.83e-02
Otu00772	Lachnospiraceae	Lachnospiraceae	adenoma	propionate	-0.246	1.65e-03	1.83e-02
Otu00323	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.245	1.73e-03	1.89e-02
Otu00353	Bacteria	Bacteria	adenoma	propionate	-0.244	1.81e-03	1.93e-02
Otu00072	Lachnospiraceae	Lachnospiraceae	adenoma	propionate	-0.322	3.02e-05	1.97e-03
Otu00092	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.241	2.06e-03	2.15e-02
Otu00037	Rikenellaceae	Rikenellaceae	adenoma	propionate	-0.316	4.54e-05	2.37e-03
Otu00401	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.316	4.36e-05	2.37e-03
Otu00220	Lachnospiraceae	Lachnospiraceae	adenoma	propionate	-0.236	2.64e-03	2.65e-02
Otu00545	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.236	2.62e-03	2.65e-02
Otu00252	Lachnospiraceae	Lachnospiraceae	adenoma	propionate	-0.234	2.81e-03	2.75e-02
Otu01228	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.234	2.85e-03	2.75e-02
Otu00128	Sutterellaceae	Sutterellaceae	adenoma	propionate	-0.232	3.01e-03	2.76e-02
Otu00326	Streptococcaceae	Streptococcaceae	adenoma	propionate	0.232	3.02e-03	2.76e-02
Otu00606	Oxalobacteraceae	Oxalobacteraceae	adenoma	propionate	-0.233	2.93e-03	2.76e-02
Otu00372	Lachnospiraceae	Lachnospiraceae	adenoma	propionate	-0.308	6.92e-05	2.79e-03
Otu00811	Clostridiales	Clostridiales	adenoma	propionate	-0.310	6.42e-05	2.79e-03
Otu01114	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.308	6.94e-05	2.79e-03
Otu00845	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.231	3.17e-03	2.85e-02
Otu00522	Firmicutes	Firmicutes	adenoma	propionate	-0.231	3.24e-03	2.86e-02
Otu00069	Bacteroidaceae	Bacteroidaceae	adenoma	propionate	-0.225	4.11e-03	3.51e-02
Otu00379	Streptococcaceae	Streptococcaceae	adenoma	propionate	0.225	4.17e-03	3.51e-02
Otu00502	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.225	4.14e-03	3.51e-02
Otu00132	Firmicutes	Firmicutes	adenoma	propionate	-0.222	4.57e-03	3.79e-02
Otu01217	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.222	4.66e-03	3.80e-02
Otu00282	Clostridiales	Clostridiales	adenoma	propionate	-0.301	1.04e-04	3.88e-03
Otu00001	Lachnospiraceae	Lachnospiraceae	adenoma	propionate	0.378	7.65e-07	3.99e-04
Otu01089	Clostridiales	Clostridiales	adenoma	propionate	-0.219	5.16e-03	4.15e-02
Otu00594	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.298	1.23e-04	4.28e-03
Otu00223	Clostridiales	Clostridiales	adenoma	propionate	-0.218	5.53e-03	4.31e-02

OTU	Family	Genus	Group	SCFA	Rho	P-value	BH
Otu00344	Clostridiales	Clostridiales	adenoma	propionate	-0.218	5.50e-03	4.31e-02
Otu00586	Lachnospiraceae	Lachnospiraceae	adenoma	propionate	-0.217	5.62e-03	4.32e-02
Otu00747	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.217	5.81e-03	4.39e-02
Otu00602	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.294	1.50e-04	4.88e-03
Otu00371	Firmicutes	Firmicutes	adenoma	propionate	-0.291	1.80e-04	4.96e-03
Otu00438	Lachnospiraceae	Lachnospiraceae	adenoma	propionate	-0.291	1.78e-04	4.96e-03
Otu00597	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.292	1.74e-04	4.96e-03
Otu00178	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.288	2.11e-04	5.01e-03
Otu00308	Firmicutes	Firmicutes	adenoma	propionate	-0.289	2.04e-04	5.01e-03
Otu00492	Clostridiales	Clostridiales	adenoma	propionate	-0.289	1.96e-04	5.01e-03
Otu00179	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.286	2.30e-04	5.23e-03
Otu00232	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.284	2.61e-04	5.68e-03
Otu00709	Clostridiales	Clostridiales	adenoma	propionate	-0.283	2.72e-04	5.68e-03
Otu00043	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.348	6.25e-06	6.91e-04
Otu00253	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.348	5.98e-06	6.91e-04
Otu00659	Firmicutes	Firmicutes	adenoma	propionate	-0.354	4.06e-06	6.91e-04
Otu00842	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.347	6.62e-06	6.91e-04
Otu00014	Lachnospiraceae	Lachnospiraceae	adenoma	propionate	0.276	3.94e-04	7.83e-03
Otu00162	Clostridiales	Clostridiales	adenoma	propionate	-0.275	4.05e-04	7.83e-03
Otu00349	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	-0.274	4.47e-04	8.04e-03
Otu00790	Bacteria	Bacteria	adenoma	propionate	-0.274	4.40e-04	8.04e-03
Otu00053	Porphyromonadaceae	Porphyromonadaceae	cancer	propionate	-0.397	6.87e-05	2.87e-02
Otu00659	Firmicutes	Firmicutes	cancer	propionate	-0.386	1.10e-04	2.87e-02
Otu00074	Lachnospiraceae	Lachnospiraceae	cancer	propionate	0.373	2.00e-04	3.49e-02
Otu00001	Lachnospiraceae	Lachnospiraceae	cancer	propionate	0.366	2.69e-04	3.52e-02
Otu00072	Lachnospiraceae	Lachnospiraceae	normal	propionate	-0.279	2.30e-04	1.09e-02
Otu00241	Pseudomonadaceae	Pseudomonadaceae	normal	propionate	0.264	5.02e-04	2.18e-02
Otu00043	Ruminococcaceae	Ruminococcaceae	normal	propionate	-0.331	1.05e-05	2.74e-03
Otu00316	Firmicutes	Firmicutes	normal	propionate	-0.258	6.95e-04	2.79e-02
Otu00093	Lachnospiraceae	Lachnospiraceae	normal	propionate	-0.255	7.78e-04	2.90e-02
Otu01139	Clostridia	Clostridia	normal	propionate	-0.250	1.00e-03	3.49e-02
Otu00144	Clostridiales	Clostridiales	normal	propionate	-0.370	6.79e-07	3.54e-04
Otu00082	Lachnospiraceae	Lachnospiraceae	normal	propionate	0.245	1.28e-03	3.93e-02
Otu00334	Clostridiales	Clostridiales	normal	propionate	-0.245	1.25e-03	3.93e-02
Otu00693	Proteobacteria	Proteobacteria	normal	propionate	-0.313	3.23e-05	5.62e-03
Otu00309	Ruminococcaceae	Ruminococcaceae	normal	propionate	-0.303	5.90e-05	6.18e-03
Otu00369	Clostridiales	Clostridiales	normal	propionate	-0.300	7.10e-05	6.18e-03
Otu00392	Firmicutes	Firmicutes	normal	propionate	-0.302	6.40e-05	6.18e-03
Otu00746	Ruminococcaceae	Ruminococcaceae	normal	propionate	-0.294	1.00e-04	7.48e-03
Otu00001	Lachnospiraceae	Lachnospiraceae	normal	propionate	0.291	1.15e-04	7.52e-03
Otu00728	Ruminococcaceae	Ruminococcaceae	normal	propionate	-0.286	1.55e-04	8.97e-03
Otu00482	Lachnospiraceae	Lachnospiraceae	normal	propionate	-0.284	1.78e-04	9.27e-03

Table S6: Wilcoxon tests between OTU relative abundance and high or low SCFA concentrations based on the overall median.

OTU	Family	Genus	Group	SCFA	P-value	BH
Otu00709	Clostridiales	Clostridiales	adenoma	acetate	7.68e-05	1.34e-02
Otu00037	Rikenellaceae	Rikenellaceae	adenoma	acetate	1.47e-04	1.92e-02
Otu00092	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	2.55e-04	2.32e-02
Otu00167	Clostridiales	Clostridiales	adenoma	acetate	2.85e-04	2.32e-02
Otu00207	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	3.12e-04	2.32e-02
Otu00232	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	3.75e-04	2.45e-02
Otu00492	Clostridiales	Clostridiales	adenoma	acetate	4.47e-04	2.59e-02
Otu00045	Rikenellaceae	Rikenellaceae	adenoma	acetate	5.64e-04	2.66e-02
Otu00416	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	6.13e-04	2.66e-02
Otu00438	Lachnospiraceae	Lachnospiraceae	adenoma	acetate	6.11e-04	2.66e-02
Otu00006	Bacteroidaceae	Bacteroidaceae	adenoma	acetate	7.41e-04	2.84e-02
Otu00230	Lachnospiraceae	Lachnospiraceae	adenoma	acetate	7.67e-04	2.84e-02
Otu00659	Firmicutes	Firmicutes	adenoma	acetate	8.15e-04	2.84e-02
Otu00094	Pasteurellaceae	Pasteurellaceae	adenoma	acetate	1.10e-03	3.59e-02
Otu00049	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	1.23e-03	3.78e-02
Otu00277	Rikenellaceae	Rikenellaceae	adenoma	acetate	1.41e-03	3.88e-02
Otu00349	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	1.41e-03	3.88e-02
Otu00043	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	1.58e-03	4.12e-02
Otu00893	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	1.76e-03	4.38e-02
Otu00179	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	2.04e-03	4.85e-02
Otu00536	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	1.87e-05	5.59e-03
Otu00594	Ruminococcaceae	Ruminococcaceae	adenoma	acetate	2.14e-05	5.59e-03
Otu00005	Lachnospiraceae	Lachnospiraceae	cancer	acetate	7.88e-05	4.11e-02
Otu00043	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	4.44e-04	1.45e-02
Otu00037	Rikenellaceae	Rikenellaceae	adenoma	butyrate	6.01e-04	1.53e-02
Otu00167	Clostridiales	Clostridiales	adenoma	butyrate	5.53e-04	1.53e-02
Otu00251	Porphyromonadaceae	Porphyromonadaceae	adenoma	butyrate	5.14e-04	1.53e-02
Otu00609	Clostridiales	Clostridiales	adenoma	butyrate	6.16e-04	1.53e-02
Otu01456	Clostridiales	Clostridiales	adenoma	butyrate	5.98e-04	1.53e-02
Otu00014	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	7.50e-04	1.78e-02
Otu00438	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	8.54e-04	1.86e-02
Otu00811	Clostridiales	Clostridiales	adenoma	butyrate	8.54e-04	1.86e-02
Otu00323	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	9.32e-04	1.95e-02
Otu00659	Firmicutes	Firmicutes	adenoma	butyrate	8.15e-06	2.13e-03
Otu00987	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	1.07e-03	2.15e-02
Otu00690	Clostridiales	Clostridiales	adenoma	butyrate	1.15e-03	2.22e-02
Otu00416	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	1.19e-03	2.23e-02
Otu00401	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	1.34e-03	2.41e-02
Otu00522	Firmicutes	Firmicutes	adenoma	butyrate	1.44e-03	2.51e-02
Otu00349	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	1.52e-03	2.56e-02

OTU	Family	Genus	Group	SCFA	P-value	BH
Otu00253	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	1.50e-05	2.62e-03
Otu00308	Firmicutes	Firmicutes	adenoma	butyrate	1.62e-03	2.64e-02
Otu00594	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	1.70e-03	2.69e-02
Otu00404	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	1.75e-03	2.69e-02
Otu00049	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	1.86e-03	2.78e-02
Otu00007	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	2.02e-03	2.92e-02
Otu01613	Clostridiales	Clostridiales	adenoma	butyrate	2.30e-03	3.24e-02
Otu00842	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	2.51e-05	3.28e-03
Otu00148	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	2.57e-03	3.29e-02
Otu00254	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	2.46e-03	3.29e-02
Otu00657	Clostridia	Clostridia	adenoma	butyrate	2.52e-03	3.29e-02
Otu01093	Clostridiales	Clostridiales	adenoma	butyrate	2.58e-03	3.29e-02
Otu00094	Pasteurellaceae	Pasteurellaceae	adenoma	butyrate	2.77e-03	3.39e-02
Otu00203	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	2.86e-03	3.39e-02
Otu00492	Clostridiales	Clostridiales	adenoma	butyrate	2.80e-03	3.39e-02
Otu01019	Clostridiales	Clostridiales	adenoma	butyrate	3.56e-03	4.13e-02
Otu00178	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	4.12e-03	4.67e-02
Otu00162	Clostridiales	Clostridiales	adenoma	butyrate	5.03e-05	5.04e-03
Otu00602	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	5.80e-05	5.04e-03
Otu00709	Clostridiales	Clostridiales	adenoma	butyrate	6.85e-05	5.11e-03
Otu00282	Clostridiales	Clostridiales	adenoma	butyrate	8.79e-05	5.74e-03
Otu00001	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	1.13e-04	5.94e-03
Otu00179	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	1.37e-04	5.94e-03
Otu00371	Firmicutes	Firmicutes	adenoma	butyrate	1.34e-04	5.94e-03
Otu01114	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	1.20e-04	5.94e-03
Otu00597	Ruminococcaceae	Ruminococcaceae	adenoma	butyrate	1.25e-06	6.55e-04
Otu00005	Lachnospiraceae	Lachnospiraceae	adenoma	butyrate	1.81e-04	7.25e-03
Otu00316	Firmicutes	Firmicutes	adenoma	butyrate	2.55e-04	9.15e-03
Otu00625	Bacteria	Bacteria	adenoma	butyrate	2.63e-04	9.15e-03
Otu00107	Lachnospiraceae	Lachnospiraceae	cancer	butyrate	3.99e-05	2.08e-02
Otu00056	Ruminococcaceae	Ruminococcaceae	cancer	butyrate	1.88e-04	4.91e-02
Otu00098	Lachnospiraceae	Lachnospiraceae	normal	butyrate	3.71e-05	1.94e-02
Otu00253	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	1.08e-04	1.42e-02
Otu00037	Rikenellaceae	Rikenellaceae	adenoma	propionate	3.85e-04	1.82e-02
Otu00179	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	3.94e-04	1.82e-02
Otu00220	Lachnospiraceae	Lachnospiraceae	adenoma	propionate	3.66e-04	1.82e-02
Otu00308	Firmicutes	Firmicutes	adenoma	propionate	4.22e-04	1.82e-02
Otu00371	Firmicutes	Firmicutes	adenoma	propionate	4.52e-04	1.82e-02
Otu00401	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	4.47e-04	1.82e-02
Otu00438	Lachnospiraceae	Lachnospiraceae	adenoma	propionate	3.23e-04	1.82e-02
Otu00536	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	2.84e-04	1.82e-02
Otu01114	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	2.14e-04	1.82e-02
Otu00043	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	5.03e-04	1.82e-02

OTU	Family	Genus	Group	SCFA	P-value	BH
Otu00842	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	5.23e-04	1.82e-02
Otu00435	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	6.94e-04	2.27e-02
Otu00207	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	7.52e-04	2.31e-02
Otu00184	Lachnospiraceae	Lachnospiraceae	adenoma	propionate	8.31e-04	2.41e-02
Otu00502	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	1.06e-03	2.71e-02
Otu00597	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	9.98e-04	2.71e-02
Otu00602	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	1.09e-03	2.71e-02
Otu00349	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	1.20e-03	2.77e-02
Otu00415	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	1.27e-03	2.77e-02
Otu00507	Acidaminococcaceae	Acidaminococcaceae	adenoma	propionate	1.28e-03	2.77e-02
Otu00811	Clostridiales	Clostridiales	adenoma	propionate	1.33e-03	2.77e-02
Otu00232	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	1.40e-03	2.81e-02
Otu00203	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	1.86e-03	3.58e-02
Otu00316	Firmicutes	Firmicutes	adenoma	propionate	1.92e-03	3.58e-02
Otu00092	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	2.12e-03	3.81e-02
Otu00251	Porphyromonadaceae	Porphyromonadaceae	adenoma	propionate	2.20e-03	3.82e-02
Otu00545	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	2.39e-03	4.03e-02
Otu00416	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	2.51e-03	4.10e-02
Otu00282	Clostridiales	Clostridiales	adenoma	propionate	2.67e-03	4.22e-02
Otu00344	Clostridiales	Clostridiales	adenoma	propionate	2.86e-03	4.38e-02
Otu00009	Lachnospiraceae	Lachnospiraceae	adenoma	propionate	3.43e-03	4.47e-02
Otu00132	Firmicutes	Firmicutes	adenoma	propionate	3.20e-03	4.47e-02
Otu00259	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	3.21e-03	4.47e-02
Otu00585	Lachnospiraceae	Lachnospiraceae	adenoma	propionate	3.29e-03	4.47e-02
Otu00609	Clostridiales	Clostridiales	adenoma	propionate	3.22e-03	4.47e-02
Otu00987	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	3.36e-03	4.47e-02
Otu00147	Streptococcaceae	Streptococcaceae	adenoma	propionate	3.86e-03	4.66e-02
Otu00309	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	3.84e-03	4.66e-02
Otu00594	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	3.93e-03	4.66e-02
Otu00745	Ruminococcaceae	Ruminococcaceae	adenoma	propionate	3.67e-03	4.66e-02
Otu00379	Streptococcaceae	Streptococcaceae	adenoma	propionate	4.07e-03	4.72e-02
Otu00006	Bacteroidaceae	Bacteroidaceae	adenoma	propionate	4.46e-03	4.80e-02
Otu00162	Clostridiales	Clostridiales	adenoma	propionate	4.51e-03	4.80e-02
Otu00790	Bacteria	Bacteria	adenoma	propionate	4.26e-03	4.80e-02
Otu01139	Clostridia	Clostridia	adenoma	propionate	4.34e-03	4.80e-02
Otu00001	Lachnospiraceae	Lachnospiraceae	adenoma	propionate	9.99e-06	5.22e-03
Otu00659	Firmicutes	Firmicutes	adenoma	propionate	2.87e-05	7.49e-03
Otu00014	Lachnospiraceae	Lachnospiraceae	adenoma	propionate	5.41e-05	9.41e-03
Otu00072	Lachnospiraceae	Lachnospiraceae	normal	propionate	4.39e-05	1.15e-02
Otu00144	Clostridiales	Clostridiales	normal	propionate	2.26e-05	1.15e-02
Otu00043	Ruminococcaceae	Ruminococcaceae	normal	propionate	7.19e-05	1.25e-02
Otu00392	Firmicutes	Firmicutes	normal	propionate	1.36e-04	1.78e-02
Otu01139	Clostridia	Clostridia	normal	propionate	1.78e-04	1.86e-02

OTU	Family	Genus	Group	SCFA	P-value	BH
Otu00030	Lachnospiraceae	Lachnospiraceae	normal	propionate	4.14e-04	2.73e-02
Otu00482	Lachnospiraceae	Lachnospiraceae	normal	propionate	4.18e-04	2.73e-02
Otu00728	Ruminococcaceae	Ruminococcaceae	normal	propionate	3.36e-04	2.73e-02
Otu00369	Clostridiales	Clostridiales	normal	propionate	4.87e-04	2.83e-02
Otu00523	Lachnospiraceae	Lachnospiraceae	normal	propionate	6.42e-04	3.35e-02