

Suppl. Table 1. Comparison of relative abundance of CD samples at phylum and genus rank calculated using MaAsLin

Variable	Feature	Value	Coefficient	N	N not 0	P-value
PTPN2	Bacteria Firmicutes	PTPN2TT	-0.0937622	144	144	0.00375245
PTPN2	Bacteria Proteobacteria	PTPN2TT	0.06589328	144	144	0.04291115
PTPN2	Bacteria Bacteroidetes	PTPN2TT	0.06378359	144	144	0.10179051
PTPN2	Bacteria Firmicutes Clostridia Clostridiales	PTPN2TT	-0.0370205	144	144	6.47E-05
PTPN2	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae	PTPN2TT	-0.0555682	144	144	0.00031274
PTPN2	Bacteria Bacteroidetes Bacteroidia Bacteroidales Bacteroidaceae Bacteroides	PTPN2TT	0.14796423	144	144	0.00152667
PTPN2	Bacteria Proteobacteria Deltaproteobacteria Desulfovibrionales Desulfovibrionaceae	PTPN2TT	-0.0045445	144	51	0.00226962
PTPN2	Bacteria Actinobacteria Actinobacteria Bifidobacteriales Bifidobacteriaceae Bifidobacterium	PTPN2TT	0.00735306	144	114	0.00318391
PTPN2	Bacteria Firmicutes Clostridia Clostridiales Veillonellaceae Megaspheara	PTPN2TT	-0.0022799	144	50	0.00414306
PTPN2	Bacteria Firmicutes Clostridia Clostridiales Mogibacteriaceae	PTPN2TT	-0.0027019	144	65	0.01113443
PTPN2	Bacteria Actinobacteria Actinobacteria Actinomycetales Actinomycetaceae Actinomycetes	PTPN2TT	-0.0034547	144	87	0.0159728
PTPN2	Bacteria Firmicutes Erysipelotrichi Erysipelotrichales Erysipelotrichaceae	PTPN2TT	0.01265071	144	141	0.0170577
PTPN2	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Lachnospira	PTPN2TT	0.00899359	144	120	0.01822859
PTPN2	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Oscillospira	PTPN2TT	-0.0121487	144	140	0.01879921
PTPN2	Bacteria Firmicutes Clostridia Clostridiales Veillonellaceae Phascolarctobacterium	PTPN2TT	-0.0191871	144	118	0.02568454
PTPN2	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Verrucomicrobiaceae Akkermansia	PTPN2TT	-0.0059895	144	96	0.03025748
PTPN2	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Roseburia	PTPN2TT	0.0146273	144	139	0.03840091
PTPN2	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Anaerotruncus	PTPN2TT	-0.0019796	144	57	0.06279705
PTPN2	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Unclassified	PTPN2TT	-0.014675	144	144	0.10949932
PTPN2	Bacteria Bacteroidetes Bacteroidia Bacteroidales	PTPN2TT	-0.0010848	144	55	0.109903
PTPN2	Bacteria Firmicutes Bacilli Gemellales Gemellaceae Unclassified	PTPN2TT	-0.0012974	144	71	0.11403868
PTPN2	Bacteria Firmicutes Clostridia Clostridiales Clostridiaceae Unclassified	PTPN2TT	0.00256629	144	103	0.12147541
PTPN2	Bacteria Firmicutes Bacilli Lactobacillales Streptococcaceae Lactococcus	PTPN2TT	0.00167471	144	69	0.13531461
PTPN2	Bacteria Firmicutes Bacilli Lactobacillales Streptococcaceae Streptococcus	PTPN2TT	-0.0043841	144	140	0.15355852
PTPN2	Bacteria Actinobacteria Actinobacteria Actinomycetales Micrococcaceae Rothia	PTPN2TT	-0.0016024	144	66	0.20212528
PTPN2	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae Enterococcus	PTPN2TT	0.00138002	144	59	0.21755828
PTPN2	Bacteria Firmicutes Clostridia Clostridiales Peptostreptococcaceae	PTPN2TT	0.00123197	144	73	0.22822526
PTPN2	Bacteria Cyanobacteria 4C0d-2 YS2	PTPN2TT	-0.001466	144	49	0.23677972
PTPN2	Bacteria Firmicutes Bacilli Lactobacillales Streptococcaceae Unclassified	PTPN2TT	0.00078646	144	46	0.24789621
PTPN2	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Unclassified	PTPN2TT	-0.0064096	144	134	0.25004661
PTPN2	Bacteria Firmicutes Erysipelotrichi Erysipelotrichales Erysipelotrichaceae Allobaculum	PTPN2TT	0.0007147	144	49	0.33347862
PTPN2	Bacteria Bacteroidetes Bacteroidia Bacteroidales Rikenellaceae	PTPN2TT	-0.0086102	144	140	0.39184985
PTPN2	Bacteria Proteobacteria Gammaproteobacteria Pseudomonadales Moraxellaceae Acinetobacter	PTPN2TT	-0.0011955	144	75	0.40421877
PTPN2	Bacteria Actinobacteria Coriobacteriales Coriobacteriaceae Adlercreutzia	PTPN2TT	-0.0005458	144	44	0.46352087
PTPN2	Bacteria Firmicutes Bacilli Lactobacillales Lactobacillaceae Lactobacillus	PTPN2TT	-0.0026235	144	120	0.47625675
PTPN2	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Ruminococcus	PTPN2TT	-0.0045856	144	142	0.49008825
PTPN2	Bacteria Proteobacteria Gammaproteobacteria Enterobacteriales Enterobacteriaceae Gluconacetobacter	PTPN2TT	0.00037464	144	46	0.62532817
PTPN2	Bacteria Firmicutes Clostridia Clostridiales Veillonellaceae Acidaminococcus	PTPN2TT	0.00019825	144	52	0.71539965
PTPN2	Bacteria Bacteroidetes Bacteroidia Bacteroidales [Paraprevotellaceae] ([Prevotella])	PTPN2TT	-0.0004212	144	107	0.73136376
PTPN2	Bacteria Firmicutes Clostridia Clostridiales Veillonellaceae Dialister	PTPN2TT	0.0012512	144	91	0.74092954
PTPN2	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Blautia	PTPN2TT	-0.002645	144	144	0.7597833
PTPN2	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Lachnobacterium	PTPN2TT	0.00013573	144	50	0.80855923
PTPN2	Bacteria Firmicutes Bacilli Bacillales Unclassified Unclassified	PTPN2TT	-0.0002515	144	99	0.8859671
PTPN22	Bacteria Verrucomicrobia	PTPN22GG	-0.0088813	144	97	0.01901026
PTPN22	Bacteria Firmicutes	PTPN22GG	-0.0116831	144	144	0.7865017
PTPN22	Bacteria Firmicutes Clostridia Clostridiales Lachnospiraceae Epulopiscium	PTPN22GG	0.00439509	144	91	0.00692548
PTPN22	Bacteria Proteobacteria Betaproteobacteria Neisseriales Neisseriaceae Neisseria	PTPN22GG	-0.003305	144	65	0.01322214
PTPN22	Bacteria Firmicutes Bacilli Lactobacillales Streptococcaceae Lactococcus	PTPN22GG	-0.003455	144	69	0.02822296
PTPN22	Bacteria Actinobacteria Actinobacteria Actinomycetales Micrococcaceae Rothia	PTPN22GG	-0.0036241	144	66	0.03167643
PTPN22	Bacteria Verrucomicrobia Verrucomicrobiae Verrucomicrobiales Verrucomicrobiaceae Akkermansia	PTPN22GG	-0.007286	144	96	0.0587959
PTPN22	Bacteria Firmicutes Bacilli Lactobacillales Enterococcaceae Enterococcus	PTPN22GG	-0.0029647	144	59	0.05898402
PTPN22	Bacteria Firmicutes Bacilli Turicibacteriales Turicibacteraceae Turicibacter	PTPN22GG	-0.0034004	144	62	0.07341242
PTPN22	Bacteria Bacteroidetes Bacteroidia Bacteroidales [Paraprevotellaceae] ([Prevotella])	PTPN22GG	-0.0023039	144	107	0.16832729
PTPN22	Bacteria Proteobacteria Gammaproteobacteria Pasteurellales Pasteurellaceae Actinobacillus	PTPN22GG	-0.0025524	144	83	0.23301187
PTPN22	Bacteria Firmicutes Bacilli Bacillales Unclassified Unclassified	PTPN22GG	-0.0027948	144	99	0.24606982
PTPN22	Bacteria Firmicutes Clostridia Clostridiales Ruminococcaceae Anaerotruncus	PTPN22GG	-0.001627	144	57	0.27191202
PTPN22	Bacteria Proteobacteria Alphaproteobacteria RF32	PTPN22GG	-0.0070532	144	89	0.33149719
PTPN22	Bacteria Firmicutes Clostridia Clostridiales Mogibacteriaceae	PTPN22GG	-0.0002556	144	65	0.85718506
PTPN22	Bacteria Proteobacteria Deltaproteobacteria Desulfovibrionales Desulfovibrionaceae	PTPN22GG	1.64E-05	144	51	0.9935961