**Supplementary Table 1. Full list of operational taxonomic units identified in the duodenal mucosal microbiota after removal of contaminants.** The number following the taxa name refers to its specific Greengenes assignment.

|  |
| --- |
| **Operational Taxonomic Unit** |
| |  | | --- | | p\_\_Actinobacteria; g\_\_Actinomyces 4350499 | | p\_\_Actinobacteria; g\_\_Actinomyces 516648 | | p\_\_Actinobacteria; g\_\_Actinomyces 526682 | | p\_\_Actinobacteria; g\_\_Actinomyces 92123 | | p\_\_Actinobacteria; g\_\_Actinomyces New.ReferenceOTU30620 | | p\_\_Actinobacteria; g\_\_Actinomyces New.ReferenceOTU32702 | | p\_\_Actinobacteria; g\_\_Atopobium 4451251 | | p\_\_Actinobacteria; g\_\_Collinsella 193575 | | p\_\_Actinobacteria; g\_\_Collinsella 2919166 | | p\_\_Actinobacteria; g\_\_Collinsella\_\_s\_\_aerofaciens 176828 | | p\_\_Actinobacteria; g\_\_Rothia 532388 | | p\_\_Bacteroidetes; g\_\_Bacteroides 177679 | | p\_\_Bacteroidetes; g\_\_Bacteroides 187841 | | p\_\_Bacteroidetes; g\_\_Bacteroides 191483 | | p\_\_Bacteroidetes; g\_\_Bacteroides 194670 | | p\_\_Bacteroidetes; g\_\_Bacteroides 2134452 | | p\_\_Bacteroidetes; g\_\_Bacteroides 2740953 | | p\_\_Bacteroidetes; g\_\_Bacteroides 2865835 | | p\_\_Bacteroidetes; g\_\_Bacteroides 301578 | | p\_\_Bacteroidetes; g\_\_Bacteroides 315429 | | p\_\_Bacteroidetes; g\_\_Bacteroides 3439403 | | p\_\_Bacteroidetes; g\_\_Bacteroides 4384516 | | p\_\_Bacteroidetes; g\_\_Bacteroides 4385318 | | p\_\_Bacteroidetes; g\_\_Bacteroides 4390839 | | p\_\_Bacteroidetes; g\_\_Bacteroides 4417335 | | p\_\_Bacteroidetes; g\_\_Bacteroides\_\_s\_\_fragilis 3786232 | | p\_\_Bacteroidetes; g\_\_Bacteroides\_\_s\_\_fragilis 4476964 | | p\_\_Bacteroidetes; g\_\_Parabacteroides\_\_s\_\_distasonis 4450711 | | p\_\_Bacteroidetes; g\_\_Porphyromonas 4311598 | | p\_\_Bacteroidetes; g\_\_Porphyromonas 4375685 | | p\_\_Bacteroidetes; g\_\_Prevotella 146094 | | p\_\_Bacteroidetes; g\_\_Prevotella 269907 | | p\_\_Bacteroidetes; g\_\_Prevotella 3910247 | | p\_\_Bacteroidetes; g\_\_Prevotella 4298291 | | p\_\_Bacteroidetes; g\_\_Prevotella 4324196 | | p\_\_Bacteroidetes; g\_\_Prevotella 4404224 | | p\_\_Bacteroidetes; g\_\_Prevotella 529349 | | p\_\_Bacteroidetes; g\_\_Prevotella\_\_s\_\_melaninogenica 220889 | | p\_\_Bacteroidetes; g\_\_Prevotella\_\_s\_\_melaninogenica 4307391 | | p\_\_Bacteroidetes; g\_\_Prevotella\_\_s\_\_melaninogenica 4307782 | | p\_\_Bacteroidetes; g\_\_Prevotella\_\_s\_\_melaninogenica 4321397 | | p\_\_Bacteroidetes; g\_\_Prevotella\_\_s\_\_nigrescens 3746312 | | p\_\_Bacteroidetes; g\_\_Prevotella\_\_s\_\_pallens 2222 | | p\_\_Firmicutes; f\_\_Erysipelotrichaceae 2498994 | | p\_\_Firmicutes; f\_\_Erysipelotrichaceae 3413566 | | p\_\_Firmicutes; f\_\_Lachnospiraceae 165183 | | p\_\_Firmicutes; f\_\_Lachnospiraceae 188856 | | p\_\_Firmicutes; f\_\_Lachnospiraceae 4414044 | | p\_\_Firmicutes; f\_\_Lachnospiraceae 4458700 | | p\_\_Firmicutes; g\_\_Enterococcus 759349 | | p\_\_Firmicutes; g\_\_Gemella 4304528 | | p\_\_Firmicutes; g\_\_Gemella 4384936 | | p\_\_Firmicutes; g\_\_Granulicatella 221127 | | p\_\_Firmicutes; g\_\_Lactobacillus 4321285 | | p\_\_Firmicutes; g\_\_Megasphaera 757622 | | p\_\_Firmicutes; g\_\_Moryella 714766 | | p\_\_Firmicutes; g\_\_Ruminococcus 173917 | | p\_\_Firmicutes; g\_\_Ruminococcus 4357871 | | p\_\_Firmicutes; g\_\_Streptococcus 1952427 | | p\_\_Firmicutes; g\_\_Streptococcus 3855116 | | p\_\_Firmicutes; g\_\_Streptococcus 4108335 | | p\_\_Firmicutes; g\_\_Streptococcus 4290143 | | p\_\_Firmicutes; g\_\_Streptococcus 4302587 | | p\_\_Firmicutes; g\_\_Streptococcus 4312339 | | p\_\_Firmicutes; g\_\_Streptococcus 4332287 | | p\_\_Firmicutes; g\_\_Streptococcus 4396519 | | p\_\_Firmicutes; g\_\_Streptococcus 4404925 | | p\_\_Firmicutes; g\_\_Streptococcus 4430300 | | p\_\_Firmicutes; g\_\_Streptococcus 4462083 | | p\_\_Firmicutes; g\_\_Streptococcus 4463579 | | p\_\_Firmicutes; g\_\_Streptococcus 4464348 | | p\_\_Firmicutes; g\_\_Streptococcus 4472685 | | p\_\_Firmicutes; g\_\_Streptococcus 4479373 | | p\_\_Firmicutes; g\_\_Streptococcus 525966 | | p\_\_Firmicutes; g\_\_Streptococcus 526131 | | p\_\_Firmicutes; g\_\_Streptococcus 528357 | | p\_\_Firmicutes; g\_\_Streptococcus 535353 | | p\_\_Firmicutes; g\_\_Streptococcus 561636 | | p\_\_Firmicutes; g\_\_Streptococcus 92535 | | p\_\_Firmicutes; g\_\_Streptococcus New.ReferenceOTU10195 | | p\_\_Firmicutes; g\_\_Streptococcus New.ReferenceOTU24800 | | p\_\_Firmicutes; g\_\_Streptococcus New.ReferenceOTU45500 | | p\_\_Firmicutes; g\_\_Streptococcus\_\_s\_\_infantis 1759711 | | p\_\_Firmicutes; g\_\_Veillonella New.ReferenceOTU48046 | | p\_\_Firmicutes; g\_\_Veillonella\_\_s\_\_dispar 2676430 | | p\_\_Firmicutes; g\_\_Veillonella\_\_s\_\_dispar 4296244 | | p\_\_Firmicutes; g\_\_Veillonella\_\_s\_\_dispar 4370169 | | p\_\_Firmicutes; g\_\_Veillonella\_\_s\_\_dispar 4459750 | | p\_\_Firmicutes; g\_\_Veillonella\_\_s\_\_dispar New.ReferenceOTU29141 | | p\_\_Firmicutes; g\_\_Veillonella\_\_s\_\_parvula 4328910 | | p\_\_Firmicutes; g\_\_Veillonella\_\_s\_\_parvula 4333043 | | p\_\_Fusobacteria; g\_\_Fusobacterium 3461438 | | p\_\_Fusobacteria; g\_\_Fusobacterium 4294781 | | p\_\_Fusobacteria; g\_\_Leptotrichia 2480553 | | p\_\_Proteobacteria; f\_\_Enterobacteriaceae 4469420 | | p\_\_Proteobacteria; f\_\_Enterobacteriaceae 4475936 | | p\_\_Proteobacteria; g\_\_Actinobacillus\_\_s\_\_parahaemolyticus 4318122 | | p\_\_Proteobacteria; g\_\_Haemophilus 4309513 | | p\_\_Proteobacteria; g\_\_Haemophilus\_\_s\_\_parainfluenzae 4303114 | | p\_\_Proteobacteria; g\_\_Haemophilus\_\_s\_\_parainfluenzae 4375080 | | p\_\_Proteobacteria; g\_\_Haemophilus\_\_s\_\_parainfluenzae 4455583 | | p\_\_Proteobacteria; g\_\_Haemophilus\_\_s\_\_parainfluenzae 4458758 | | p\_\_Proteobacteria; g\_\_Kingella New.ReferenceOTU18610 | | p\_\_Proteobacteria; g\_\_Neisseria 4297332 | | p\_\_Proteobacteria; g\_\_Neisseria 4312342 | | p\_\_Proteobacteria; g\_\_Neisseria 4440404 | | p\_\_Proteobacteria; g\_\_Neisseria 516198 | | p\_\_Proteobacteria; g\_\_Neisseria\_\_s\_\_subflava 4374645 | | p\_\_Proteobacteria; g\_\_Neisseria\_\_s\_\_subflava 76751 | |

Square brackets [ ] denote an assignment that most closely resembles the taxon in brackets, but cannot be identified further. The most specific level of assignment is listed for each taxon, with 97% similarity to the Greengenes v13.8 reference database. Abbreviations: p, phylum; f, family; g, genus; s, species; NA, not assigned; OTU, operational taxonomic unit.