**Table S5 – ASVs identified as contaminants.** We employed both the frequency and prevalence methods in the R package decontam v.1.10.0 to identify putative contaminant ASVs. In total, 28 ASVs were identified and excluded from our analysis as contaminants.

|  |  |
| --- | --- |
| ASV | Method |
| D\_0\_\_Bacteria;D\_1\_\_Proteobacteria;D\_2\_\_Alphaproteobacteria;D\_3\_\_Caulobacterales;D\_4\_\_Caulobacteraceae;D\_5\_\_Brevundimonas | Frequency |
| D\_0\_\_Bacteria;D\_1\_\_Bacteroidetes;D\_2\_\_Bacteroidia;D\_3\_\_Sphingobacteriales;D\_4\_\_Sphingobacteriaceae;D\_5\_\_ Pedobacter | Frequency |
| D\_0\_\_Bacteria;D\_1\_\_Bacteroidetes;D\_2\_\_Bacteroidia;D\_3\_\_Chitinophagales;D\_4\_\_Chitinophagaceaee;D\_5\_\_ Taibaiella;D\_6\_\_Taibaiella coffeisoli | Frequency |
| D\_0\_\_Bacteria;D\_1\_\_Firmicutes;D\_2\_\_Bacilli;D\_3\_\_Bacillales;D\_4\_\_Bacilliaceae;D\_5\_\_Bacillus | Frequency |
| D\_0\_\_Bacteria;D\_1\_\_Bacteroidetes;D\_2\_\_Bacteroidia;D\_3\_\_Flavobacteriales;D\_4\_\_Weeksellaceae;D\_5\_\_ Bergeyella;D\_6\_\_Cloacibacterium sp. canine oral taxon 320 | Frequency |
| D\_0\_\_Bacteria;D\_1\_\_Firmicutes;D\_2\_\_Bacilli;D\_3\_\_Bacillales;D\_4\_\_Staphylococcaceae;D\_5\_\_Staphylococcus | Frequency |
| D\_0\_\_Bacteria;D\_1\_\_Proteobacteria;D\_2\_\_Gammaproteobacteria;D\_3\_\_Betaproteobacteria;D\_4\_\_ Procabacteriaceae;D\_5\_\_Procabacter | Frequency |
| D\_0\_\_Bacteria;D\_1\_\_Firmicutes;D\_2\_\_Clostridia;D\_3\_\_Clostridiales;D\_4\_\_Ruminococcaceae;D\_5\_\_ Faecalibacterium | Frequency |
| D\_0\_\_Bacteria;D\_1\_\_Proteobacteria;D\_2\_\_Gammaproteobacteria;D\_3\_\_Pseudomonadales;D\_4\_\_Moraxellaceae;D\_5\_\_Moraxella;D\_6\_\_unidentified | Frequency |
| D\_0\_\_Bacteria;D\_1\_\_Proteobacteria;D\_2\_\_Alphaproteobacteria;D\_3\_\_Rhizobiales;D\_4\_\_Xantobacteraceae;D\_5\_\_ Bradyrhizobium | Prevalence |
| D\_0\_\_Bacteria;D\_1\_\_Bacteroidetes;D\_2\_\_Bacteroidia;D\_3\_\_Flavobacteriales | Prevalence |
| D\_0\_\_Bacteria;D\_1\_\_Proteobacteria;D\_2\_\_Gammaproteobacteria;D\_3\_\_Betaproteobacteriales;D\_4\_\_ Methylophilaceae;D\_5\_\_Methylotenera | Prevalence |
| D\_0\_\_Bacteria;D\_1\_\_Bacteroidetes;D\_2\_\_Bacteroidia;D\_3\_\_Bacteroidales;D\_4\_\_Prevotellaceae;D\_5\_\_Prevotella 9 | Prevalence |
| D\_0\_\_Bacteria;D\_1\_\_Proteobacteria;D\_2\_\_Gammaproteobacteria;D\_3\_\_Betaproteobacteriales;D\_4\_\_Burkholderiaceae;D\_5\_\_Aquabacterium;D\_6\_\_Aquabacterium citratiphium | Prevalence |
| D\_0\_\_Bacteria;D\_1\_\_Proteobacteria;D\_2\_\_Gammaproteobacteria;D\_3\_\_Betaproteobacteria;D\_4\_\_Burkholderiaceae | Prevalence |
| D\_0\_\_Bacteria;D\_1\_\_Proteobacteria;D\_2\_\_Alphaproteobacteria;D\_3\_\_Caulobacterales;D\_4\_\_Caulobacteraceae;D\_5\_\_Brevundimonas | Prevalence |
| D\_0\_\_Bacteria;D\_1\_\_Patescibacteria;D\_2\_\_ABY1;D\_3\_\_Candidatus Megasanikbacteria;D\_4\_\_uncultured bacterium;D\_5\_\_uncultured bacterium;D\_6\_\_uncultured bacterium | Prevalence |
| D\_0\_\_Bacteria;D\_1\_\_Firmicutes;D\_2\_\_Bacilli;D\_3\_\_Lactobacillales;D\_4\_\_Leuconostocaceae;D\_5\_\_Weissella | Prevalence |
| D\_0\_\_Bacteria;D\_1\_\_Proteobacteria;D\_2\_\_Gammaproteobacteria;D\_3\_\_Aeromonadales;D\_4\_\_Aeromonadaceae;D\_5\_\_Aeromonas | Prevalence |
| D\_0\_\_Bacteria;D\_1\_\_Actinobacteria;D\_2\_\_Actinobacteria;D\_3\_\_Micrococcales;D\_4\_\_Microbacteriaceae | Prevalence |
| D\_0\_\_Bacteria;D\_1\_\_Proteobacteria;D\_2\_\_Gammaproteobacteria;D\_3\_\_Betaproteobacteriales;D\_4\_\_ Burkholderiaceae;D\_5\_\_Acidovorax | Prevalence |
| D\_0\_\_Bacteria;D\_1\_\_Spirochaetes;D\_2\_\_Spirochaetia;D\_3\_\_Spirochaetales;D\_4\_\_Spirochaetaceae;D\_5\_\_ Treponema 2;D\_6\_\_Treponema succinifaciens DSM 2489 | Prevalence |
| D\_0\_\_Bacteria;D\_1\_\_Firmicutes;D\_2\_\_Bacilli;D\_3\_\_Bacillales;D\_4\_\_Staphylococcaceae;D\_5\_\_Staphylococcus | Prevalence |
| D\_0\_\_Bacteria;D\_1\_\_Actinobacteria;D\_2\_\_Actinobacteria;D\_3\_\_Frankiales;D\_4\_\_Geodermatophilaceae;D\_5\_\_ Geodermatophilus | Prevalence |
| D\_0\_\_Bacteria;D\_1\_\_Actinobacteria;D\_2\_\_Actinobacteria;D\_3\_\_Micrococcaceae;D\_5\_\_Micrococcus | Prevalence |
| D\_0\_\_Bacteria;D\_1\_\_Bacteroidetes;D\_2\_\_Bacteroidia;D\_3\_\_Bacteroidales;D\_4\_\_Bacteroidaceae;D\_5\_\_Bacteroides | Prevalence |
| D\_0\_\_Bacteria;D\_1\_\_Actinobacteria;D\_2\_\_Actinobacteria;D\_3\_\_Frankiales;D\_4\_\_Cryptosporangiaceae;D\_5\_\_ Fodinicola;D\_6\_\_metagenome | Prevalence |
| D\_0\_\_Bacteria;D\_1\_\_Proteobacteria;D\_2\_\_Alphaproteobacteria;D\_3\_\_Caulobacterales;D\_4\_\_Caulobacteraceae;D\_5\_\_uncultured | Prevalence |