**Table S2**: **Group and species-specific 16S rRNA gene-targeted primers and probes.**

|  |  |  |
| --- | --- | --- |
| ***Target organism*** | ***Primer******and probe*** | ***Sequence 5’- 3’*** |
| *All-bacteria* **(\*)** | F\_Bact 1369 | CGG TGA ATA CGT TCC CGG |
|  | R\_Prok1492 | TAC GG**C** TAC CTT GTT ACG ACT T |
|  | **P\_TM1389F** | **6FAM-CTT GTA CAC ACC GCC CGT C** |
| *C. leptum* | F\_Clept 09 | CCT TCC GTG CCG SAG TTA |
|  | R\_Clept 08 | GAA TTA AAC CAC ATA CTC CAC TGC TT |
|  | **P-Clep 01** | **6FAM-CAC AAT AAG TAA TCC ACC** |
| *Bifidobacterium* | F\_Bifid 09c | CGG GTGAGT AAT GCG TGA CC |
|  | R\_Bifid 06 | TGA TAG GAC GCG ACC CCA |
|  | **P\_Bifid** | **6FAM-CTC CTG GAA ACG GGT G** |
| *C. coccoides* | F\_Ccoc 07 | GAC GCC GCG TGA AGG A |
|  | R\_Ccoc 14 | AGC CCC AGC CTT TCA CAT C |
|  | **P\_Erec482(\*)** | **VIC-CGG TAC CTG ACT AAG AAG** |
| *Bacteroides/* | F\_Bacter 11 | CCT WCG ATG GAT AGG GGT T |
| *Prevotella* | R\_Bacter 08 | CAC GCT ACT TGG CTG GTT CAG |
|  | **P\_Bac303(\*)** | **VIC-AAG GTC CCC CAC ATT G** |
| *E. coli* | E.coli F | CAT GCC GCG TGT ATG AAG AA |
|  | E.coli R | CGG GTA ACG TCA ATG AGC AAA |
| *Lactobacillus/* | F\_Lacto 05 | AGC AGT AGG GAA TCT TCC A |
| *Leuconostoc/ Pediococcus* | R\_Lacto 04 | CGC CAC TGG TGT TCY TCC ATA TA |
| *F. prausnitzii* | Fprau 07 | CCA TGA ATT GCC TTC AAA ACT GTT |
|  | Fprau 02 | GAG CCT CAG CGT CAG TTG GT |

(\*) modified from reference

Primers and probes were constructed to target all dominant and subdominant bacterial species in accordance to the pyrosequencing results. Methods have been previously described [26]. Probe sequences are in bold.