**Influence of low FODMAP and gluten-free diets on gut microbiota alternations and symptom severity in Iranian patients with irritable bowel syndrome; a clinical trial study**

Running title: Influence of low FODMAP & gluten-free on IBS gut microbiota

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| **Target taxon** | **Primer name** | **Primer sequence (5ꞌ-3ꞌ)** | **Amplicon length (bp)** | **Reference** |
| Eubacteria | UniF340  UniR514 | ACTCCTACGGGAGGCAGCAGT  ATTACCGCGGCTGCTGGC | ~ 200 bp | [24] |
| Lactobacillus spp. | Lacto-F  Lacto-R | TGGATGCCTTGGCACTAG  AAATCTCCGGATCAAAGCTTAC | ~ 89 bp | [25] |
| Bifidobacterium spp. | Bifid-F  Bifid-R | GGGATGCTGGTGTGGAAGAG  TGCTCGCGTCCACTATCCAG | ~ 200 bp | [25] |
| Bacteroidetes | Bac960-F  Bac1100-R | GTTTAATTCGATGATACGCG  TTAAGCCGACACCTCACG | ~ 137 bp | [26] |
| Firmicutes | Firm934-F  Firm1060-R | GGAG**Y**ATGTGGTTTAATTCGAAGCA  AGCTGACGACAACCATGCAC | ~ 129 bp | [26] |
| Actinobacteria | Actino-F  Actino-R | GCG**K**CCTATCAGCTTGTTGGTG  CCGCCTACGAGC**Y**CTTTACGC | ~ 333 bp | [27] |
| Enterobacteriaceae | Enterob-F  Enterob-R | CGTCGCAAGM**M**CAAAGAG  TTACCGCGGCTGCTGGCAC | ~ 351 bp | [27] |
| Streptococcus spp. | Str1-F  Str2-R | GTACAGTTGCTTCAGGACGT  GTTCGATTTCRTCACGTTG | ~ 195 bp | [28] |
| Ruminococcus | Rflbr730F  Clep866mR§ | GGCGGCYT**R**CTGGGCTTT  GCAGGTGGAT**W**ACTTATTGTGTTAA | ~ 157 bp | [29] |

Table S1. The taxon-specific primers used in this study.