**Table S1:** **Primers used in this study**

|  |  |  |  |
| --- | --- | --- | --- |
| **Primer** | **Sequence** | **Target gene** | **Product size** |
| 23F1075 | gttggcttrgargcagc | 23S rRNA (1075-2241) | 1167 bp |
| 23R2241 | accgccccagthaaact | 23S rRNA (1075-2241) | 1167 bp |
| GAPDH\_F | ggatcaggtcatctccgctg | GAPDH *F. prausnitzii* SL 3/3 | 518 bp |
| GAPDH\_R | accaagacacgacctgaacc | GAPDH *F. prausnitzii*SL 3/3 | 518 bp |
| MCherry\_F | gggcgaggaggataacatgg | mCherry (12-442) | 431 bp |
| MCherry\_R | agcccatggtcttcttctgc | mCherry (12-442) | 431 bp |
| sFGFP\_F | tgtccgtggagagggtgaa | sFGFP (84-734) | 651 bp |
| sFGFP\_R | tggtgatggtgatgggatcc | sFGFP (84-734) | 651 bp |
| sF100\_F | tacaagacgcgtgctgaagt | sFGFP (316-418) | 102 bp |
| sF100\_R | tgtgtccgagaatgtttcca | sFGFP (316-418) | 102 bp |
| sF300\_F | tcacatgaaacggcatgact | sFGFP (228-529) | 302 bp |
| sF300\_R | gaacggaaccatcttcaacg | sFGFP (228-529) | 302 bp |
| sF500\_F | ggagagggtgaaggtgatgc | sFGFP (91-585) | 495 bp |
| sF500\_R | taaaaggacagggccatcgc | sFGFPs (91-585) | 495 bp |