**Table S1: The sequences informations of all samples**

|  |  |  |  |
| --- | --- | --- | --- |
| **Group** | **Sample\_info** | **ASV\_num** | **Seq\_num** |
| **G1** | H\_2 | 30 | 37247 |
|  | H\_3 | 78 | 37247 |
|  | H\_4 | 32 | 37247 |
|  | H\_7 | 30 | 37247 |
|  | H\_9 | 54 | 37247 |
|  | H\_11 | 57 | 37247 |
|  | H\_13 | 46 | 37247 |
|  | H\_15 | 62 | 37247 |
|  | H\_18 | 38 | 37247 |
|  | H\_19 | 31 | 37247 |
|  | H\_21 | 27 | 37247 |
|  | H\_23 | 27 | 37247 |
|  | H\_24 | 33 | 37247 |
|  | H\_25 | 51 | 37247 |
|  | H\_26 | 70 | 37247 |
|  | H\_28 | 49 | 37247 |
| **Total** |  | 715 | 595952 |
| **G2** | C\_2 | 44 | 37247 |
|  | C\_4 | 21 | 37247 |
|  | C\_5 | 57 | 37247 |
|  | C\_6 | 48 | 37247 |
|  | C\_8 | 98 | 37247 |
|  | C\_26 | 37 | 37247 |
|  | C\_27 | 49 | 37247 |
|  | C\_28 | 40 | 37247 |
|  | C\_29 | 40 | 37247 |
|  | C\_30 | 33 | 37247 |
|  | C\_31 | 55 | 37247 |
|  | C\_33 | 23 | 37247 |
|  | C\_35 | 47 | 37247 |
|  | C\_36 | 43 | 37247 |
|  | C\_37 | 31 | 37247 |
| **Total** |  | 666 | 558705 |
| **G3** | C\_3 | 34 | 37247 |
|  | C\_11 | 55 | 37247 |
|  | C\_13 | 70 | 37247 |
|  | C\_14 | 73 | 37247 |
|  | C\_15 | 33 | 37247 |
|  | C\_16 | 25 | 37247 |
|  | C\_17 | 46 | 37247 |
|  | C\_19 | 30 | 37247 |
|  | C\_20 | 34 | 37247 |
|  | C\_21 | 41 | 37247 |
|  | C\_22 | 21 | 37247 |
|  | C\_23 | 76 | 37247 |
|  | C\_24 | 44 | 37247 |
|  | C\_25 | 25 | 37247 |
|  | C\_32 | 33 | 37247 |
| **Total** |  | 640 | 558705 |