**Table S1:** Primer sequences used in this study

|  |  |
| --- | --- |
| **Primer name** | **Sequence** |
| Long\_forward\_1 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNGTTGGCCGCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_2 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNTATTAACTNCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_3 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNCTAATGGCNNCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_4 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNAACCAGTCNNNCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_5 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNGAACGGAGCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_6 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNACTGAAGTNCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_7 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNTTGGCTATNNCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_8 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNTGGCGATTNNNCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_9 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNCCTCTGATCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_10 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNCTCATGCGNCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_11 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNTTCAGCGANNCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_12 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNGGATGCCANNNCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_13 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNCGGTCGAGCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_14 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNAAGACTACNCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_15 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNAACGCTAANNCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_16 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNGCCTACGCNNNCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_17 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNTGACTGCTCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_18 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNATTGCCGCNCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_19 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNCAACCTTANNCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_20 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNGGAGGCTGNNNCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_21 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNAATCGATACGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_22 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNACCAATTGNCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_23 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNCCTAATAANNCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_24 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNGGATTAGGNNNCGAGAGTTTGATCMTGGCTCAG |
| Long\_forward\_25 | ACACTCTTTCCCTACACGACGCTCTTCCGATCTNNNNNNNNNNGCGTTACCCGAGAGTTTGATCMTGGCTCAG |
| Long\_reverse\_1 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNGTTGGCCGTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_2 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNTATTAACTNNNTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_3 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNCTAATGGCTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_4 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNAACCAGTCNNNTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_5 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNGAACGGAGTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_6 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNACTGAAGTNNTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_7 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNTTGGCTATNNNTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_8 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNTGGCGATTTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_9 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNCCTCTGATNTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_10 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNCTCATGCGNNTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_11 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNTTCAGCGANTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_12 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNGGATGCCANNTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_13 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNCGGTCGAGNTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_14 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNAAGACTACNNNTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_15 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNAACGCTAATAGACGGGCGGTGTGTRCA |
| Long\_reverse\_16 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNGCCTACGCNTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_17 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNTGACTGCTNNTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_18 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNATTGCCGCNTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_19 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNCAACCTTANNTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_20 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNGGAGGCTGNTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_21 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNAATCGATANNTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_22 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNACCAATTGNTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_23 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNCCTAATAANTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_24 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNGGATTAGGNNTAGACGGGCGGTGTGTRCA |
| Long\_reverse\_25 | CTCGGCATTCCTGCTGAACCGCTCTTCCGATCTNNNNNNNNNNGCGTTACCNNNTAGACGGGCGGTGTGTRCA |
| PE\_1 | AATGATACGGCGACCACCGAGATCTACACTCTTTCCCTACACGACG |
| PE\_2 | CAAGCAGAAGACGGCATACGAGATCGGTCTCGGCATTCCTGCTGAACCG |
| V4\_forward\_1 | AATGATACGGCGACCACCGAGATCTACACAACCAGTCTATGGTAATTGTGTGCCAGCMGCCGCGGTAA |
| V4\_forward\_2 | AATGATACGGCGACCACCGAGATCTACACAACGCTAATATGGTAATTGTGTGCCAGCMGCCGCGGTAA |
| V4\_forward\_3 | AATGATACGGCGACCACCGAGATCTACACAAGACTACTATGGTAATTGTGTGCCAGCMGCCGCGGTAA |
| V4\_forward\_4 | AATGATACGGCGACCACCGAGATCTACACAATCGATATATGGTAATTGTGTGCCAGCMGCCGCGGTAA |
| V4\_forward\_5 | AATGATACGGCGACCACCGAGATCTACACACCAATTGTATGGTAATTGTGTGCCAGCMGCCGCGGTAA |
| V4\_forward\_6 | AATGATACGGCGACCACCGAGATCTACACACTGAAGTTATGGTAATTGTGTGCCAGCMGCCGCGGTAA |
| V4\_forward\_7 | AATGATACGGCGACCACCGAGATCTACACATTGCCGCTATGGTAATTGTGTGCCAGCMGCCGCGGTAA |
| V4\_forward\_8 | AATGATACGGCGACCACCGAGATCTACACCAACCTTATATGGTAATTGTGTGCCAGCMGCCGCGGTAA |
| V4\_forward\_9 | AATGATACGGCGACCACCGAGATCTACACCCTAATAATATGGTAATTGTGTGCCAGCMGCCGCGGTAA |
| V4\_forward\_10 | AATGATACGGCGACCACCGAGATCTACACCCTCTGATTATGGTAATTGTGTGCCAGCMGCCGCGGTAA |
| V4\_forward\_14 | AATGATACGGCGACCACCGAGATCTACACGAACGGAGTATGGTAATTGTGTGCCAGCMGCCGCGGTAA |
| V4\_forward\_16 | AATGATACGGCGACCACCGAGATCTACACGCGTTACCTATGGTAATTGTGTGCCAGCMGCCGCGGTAA |
| V4\_forward\_18 | AATGATACGGCGACCACCGAGATCTACACGGATGCCATATGGTAATTGTGTGCCAGCMGCCGCGGTAA |
| V4\_forward\_20 | AATGATACGGCGACCACCGAGATCTACACGTTGGCCGTATGGTAATTGTGTGCCAGCMGCCGCGGTAA |
| V4\_forward\_22 | AATGATACGGCGACCACCGAGATCTACACTGACTGCTTATGGTAATTGTGTGCCAGCMGCCGCGGTAA |
| V4\_forward\_24 | AATGATACGGCGACCACCGAGATCTACACTTCAGCGATATGGTAATTGTGTGCCAGCMGCCGCGGTAA |
| V4\_reverse\_1 | CAAGCAGAAGACGGCATACGAGATAACCAGTCAGTCAGTCAGCCGGACTACHVGGGTWTCTAAT |
| V4\_reverse\_7 | CAAGCAGAAGACGGCATACGAGATATTGCCGCAGTCAGTCAGCCGGACTACHVGGGTWTCTAAT |
| V4\_reverse\_8 | CAAGCAGAAGACGGCATACGAGATCAACCTTAAGTCAGTCAGCCGGACTACHVGGGTWTCTAAT |
| V4\_reverse\_9 | CAAGCAGAAGACGGCATACGAGATCCTAATAAAGTCAGTCAGCCGGACTACHVGGGTWTCTAAT |
| V4\_reverse\_15 | CAAGCAGAAGACGGCATACGAGATGCCTACGCAGTCAGTCAGCCGGACTACHVGGGTWTCTAAT |
| V4\_reverse\_16 | CAAGCAGAAGACGGCATACGAGATGCGTTACCAGTCAGTCAGCCGGACTACHVGGGTWTCTAAT |
| V4\_reverse\_17 | CAAGCAGAAGACGGCATACGAGATGGAGGCTGAGTCAGTCAGCCGGACTACHVGGGTWTCTAAT |
| V4\_reverse\_23 | CAAGCAGAAGACGGCATACGAGATTGGCGATTAGTCAGTCAGCCGGACTACHVGGGTWTCTAAT |
| V4\_reverse\_24 | CAAGCAGAAGACGGCATACGAGATTTCAGCGAAGTCAGTCAGCCGGACTACHVGGGTWTCTAAT |
| V4\_reverse\_25 | CAAGCAGAAGACGGCATACGAGATTTGGCTATAGTCAGTCAGCCGGACTACHVGGGTWTCTAAT |
| Illumina\_E\_1 | AATGATACGGCGACCACCGA |
| Illumina\_E\_2 | CAAGCAGAAGACGGCATACGA |
| V4\_read\_1 | TATGGTAATTGTGTGCCAGCMGCCGCGGTAA |
| V4\_read\_2 | AGTCAGTCAGCCGGACTACHVGGGTWTCTAAT |
| V4\_index\_read | ATTAGAWACCCBDGTAGTCCGGCTGACTGACT |