# frag1 (same as before, no need for order)

gttagacgaagcttgggctgcaggtcgactctagaggatccgccgccaccatggtgctgcagacccaggtgttcatcagcctgctgctgtggatctctggcgcctatggaatgtacccttacgatgtacctgattacgccgacatccagatgacacagactacatcctccctgtctgcctctctgggagacagagtcaccatcagttgcagggcaagtcaggacattagtaaatatttaaattggtatcagcagaaaccagatggaactgttaaactcctgatctaccatacatcaagattacactcaggagtcccatcaaggttcagtggcagtgggtctggaacagattattctctcaccattagcaacctggagcaagaagatattgccacttacttttgccaacagggtaatacgcttccgtacacgttcggaggggggaccaagctggagatcacaggtggcggtggctcgggcggtggtgggtcgggtggcggcggatctgaggtgaaactgcaggagtcaggacctggcctggtggcgccctcacagagcctgtccgtcacatgcactgtctcaggggtctcattacccgactatggtgtaagctggattcgccagcctccacgaaagggtctggagtggctgggagtaatatggggtagtgaaaccacatactataattcagctctcaaatccagactgaccatcatcaaggacaactccaagagccaagttttcttaaaaatgaacagtctgcaaactgatgacacagccatttactactgtgccaaacattattactacggtggtagctatgctatggactactggggccaaggaacctcagtcaccgtctcctcagagtctaaatacggaccgccttgtcctccttgtcccgctcctcctgttgccggaccttccgtgttcctgtttcctccaaagcctaaggacaccctgatgatcagcaggacccctgaagtgacctgcgtggtggtggatgtgtcccaagaggatcccgaggtgcagttcaactggtatgtggacggcgtggaagtgcacaacgccaagaccaagcctagagaggaacagttccagagcacctacagagtggtgtccgtgctgacagtgctgcaccaggattggctgaacggcaaagagtacaagtgcaaggtgtccaacaagggcctgcctagcagcatcgagaaaaccatctccaaggccaagggccagccaagagagccccag

# frag2 (same as before, no need for order.)

# new\_frag3 (MS2 coat protein\_near\_M)

tctccaaggccaagggccagccaagagagccccaggtttacacactgcctccaagccaagaggaaatgaccaagaatcaggtgtccctgacatgcctggtcaagggcttctacccctccgatatcgccgtggaatgggagagcaatggccagcctgagaacaactacaagaccacacctcctgtgctggacagcgacggcagtttcttcctgtatagtagactcaccgtggataaatcaagatggcaagagggcaacgtgttcagctgcagcgtgatgcacgaggccctgcacaaccactacacccagaaaagcctgagcctgtctctgggcaagttctgggttctggtggtggttgggggtgttctcgcatgttactctttgttggtgacagtcgcattcattatattttgggttcatatgctagccgttaaaatggcttctaactttactcagttcgttctcgtcgacaatggcggaactggcgacgtgactgtcgccccaagcaacttcgctaacgggatcgctgaatggatcagctctaactcgcgttcacaggcttacaaagtaacctgtagcgttcgtcagagctctgcgcagaatcgcaaatacaccatcaaagtcgaggtgcctaaaggcgcctggcgttcgtacttaaatatggaactaaccattccaattttcgccacgaattccgactgcgagcttattgttaaggcaatgcaaggtctcctaaaagatggaaacccgattccctcagcaatcgcagcaaactccggcatctacgcggattcttcaactttcttgtacaaagtgggcaagcgagggcggaaaaaactgctttacatttttaaacagccttttatgcgcccagtccaaaccacacaggaagaggatggctgctcttgtcgatttcccgaggaggaagagggaggctgtgagcttagagttaaattttcaagaagtgcagatgctccagcgtataagcaaggccagaaccaactctataacgagctgaatttgggtcgaagggaagaatatgacgtgcttgataaacgcagaggcagggacccggagatgggcggtaaacctcgccggaaaaacccgcaggaaggactctataacgagcttcagaaagacaaaatggcagaggcgtacagtgagataggcatgaaaggggagcgccgcagagggaaaggacacgacgggttgtaccagggacttagtacggctaccaaagacacatatgacgcactccacatgcaagctcttcccccccgctaataagaattcgatatcaagcttatcgataatcaacctctggatta

# new\_frag4 (MS2 coat protein\_near\_CD3zeta)

tctccaaggccaagggccagccaagagagccccaggtttacacactgcctccaagccaagaggaaatgaccaagaatcaggtgtccctgacatgcctggtcaagggcttctacccctccgatatcgccgtggaatgggagagcaatggccagcctgagaacaactacaagaccacacctcctgtgctggacagcgacggcagtttcttcctgtatagtagactcaccgtggataaatcaagatggcaagagggcaacgtgttcagctgcagcgtgatgcacgaggccctgcacaaccactacacccagaaaagcctgagcctgtctctgggcaagttctgggttctggtggtggttgggggtgttctcgcatgttactctttgttggtgacagtcgcattcattatattttgggttaagcgagggcggaaaaaactgctttacatttttaaacagccttttatgcgcccagtccaaaccacacaggaagaggatggctgctcttgtcgatttcccgaggaggaagagggaggctgtgagcttcatatgctagccgttaaaatggcttctaactttactcagttcgttctcgtcgacaatggcggaactggcgacgtgactgtcgccccaagcaacttcgctaacgggatcgctgaatggatcagctctaactcgcgttcacaggcttacaaagtaacctgtagcgttcgtcagagctctgcgcagaatcgcaaatacaccatcaaagtcgaggtgcctaaaggcgcctggcgttcgtacttaaatatggaactaaccattccaattttcgccacgaattccgactgcgagcttattgttaaggcaatgcaaggtctcctaaaagatggaaacccgattccctcagcaatcgcagcaaactccggcatctacgcggattcttcaactttcttgtacaaagtgggcagagttaaattttcaagaagtgcagatgctccagcgtataagcaaggccagaaccaactctataacgagctgaatttgggtcgaagggaagaatatgacgtgcttgataaacgcagaggcagggacccggagatgggcggtaaacctcgccggaaaaacccgcaggaaggactctataacgagcttcagaaagacaaaatggcagaggcgtacagtgagataggcatgaaaggggagcgccgcagagggaaaggacacgacgggttgtaccagggacttagtacggctaccaaagacacatatgacgcactccacatgcaagctcttcccccccgctaataagaattcgatatcaagcttatcgataatcaacctctggatta

# new\_frag5 (MS2 coat protein\_end)

tctccaaggccaagggccagccaagagagccccaggtttacacactgcctccaagccaagaggaaatgaccaagaatcaggtgtccctgacatgcctggtcaagggcttctacccctccgatatcgccgtggaatgggagagcaatggccagcctgagaacaactacaagaccacacctcctgtgctggacagcgacggcagtttcttcctgtatagtagactcaccgtggataaatcaagatggcaagagggcaacgtgttcagctgcagcgtgatgcacgaggccctgcacaaccactacacccagaaaagcctgagcctgtctctgggcaagttctgggttctggtggtggttgggggtgttctcgcatgttactctttgttggtgacagtcgcattcattatattttgggttaagcgagggcggaaaaaactgctttacatttttaaacagccttttatgcgcccagtccaaaccacacaggaagaggatggctgctcttgtcgatttcccgaggaggaagagggaggctgtgagcttagagttaaattttcaagaagtgcagatgctccagcgtataagcaaggccagaaccaactctataacgagctgaatttgggtcgaagggaagaatatgacgtgcttgataaacgcagaggcagggacccggagatgggcggtaaacctcgccggaaaaacccgcaggaaggactctataacgagcttcagaaagacaaaatggcagaggcgtacagtgagataggcatgaaaggggagcgccgcagagggaaaggacacgacgggttgtaccagggacttagtacggctaccaaagacacatatgacgcactccacatgcaagctcttcccccccgccatatgctagccgttaaaatggcttctaactttactcagttcgttctcgtcgacaatggcggaactggcgacgtgactgtcgccccaagcaacttcgctaacgggatcgctgaatggatcagctctaactcgcgttcacaggcttacaaagtaacctgtagcgttcgtcagagctctgcgcagaatcgcaaatacaccatcaaagtcgaggtgcctaaaggcgcctggcgttcgtacttaaatatggaactaaccattccaattttcgccacgaattccgactgcgagcttattgttaaggcaatgcaaggtctcctaaaagatggaaacccgattccctcagcaatcgcagcaaactccggcatctacgcggattcttcaactttcttgtacaaagtgggctaataagaattcgatatcaagcttatcgataatcaacctctggatta

**Note:**

|  |  |  |
| --- | --- | --- |
| **Name** | **HiFi combination** |  |
| **Corrected\_CD19\_CAR** | **Frag1 + Frag2** | **done** |
| **Corrected\_CD19\_MS2\_nearT\_CAR** | **Frag1 + Frag3** |  |
| **Corrected\_CD19\_MS2\_nearCD3zeta\_CAR** | **Frag1 + Frag4** |  |
| **Corrected\_CD19\_MS2\_end\_CAR** | **Frag1 + Frag5** |  |