**Table S2. shRNAs sequences**

|  |  |  |
| --- | --- | --- |
| Name | Target | Sequence |
| TRCN0000040056 | MLH1 | CCGGCCAAGTGAAGAATATGGGAAACTCGAGTTTCCCATATTCTTCACTTGGTTTTTG |
| TRCN0000039670 | MSH2 | CCGGGCCTTGCTGAATAAGTGTAAACTCGAGTTTACACTTATTCAGCAAGGCTTTTTG |
| #1864 (Addgene) | Scramble | CCTAAGGTTAAGTCGCCCTCGCTCGAGCGAGGGCGACTTAACCTTAGG |