**S3 Table**

**Sequencing primers to confirm engineered mutations**

|  |  |  |  |
| --- | --- | --- | --- |
| Block | Gene | Primer | Sequence |
| 1 | **E1B19K** | **Ad5-16** | CTTGCATGGCGTGTTAAATGG |
| 1 | **E1B55K**  **n-terminus** | **Ad5-17** | CAAGAGAAGGTCATCAAGAC |
| 1 | **E1B55K**  **c-terminus** | **Ad5-18** | GGATGTGACCGAGGAGCTGAG |
| 7 | **E4ORF6**  **E4ORF3** | **Ad5-23** | TACGGAGTGCGCCGAGACAAC |
| 7 | **E4ORF3** | **Ad5-24** | TCTCATCTCGCCACCTTCTC |