

| gRNA | Targeting gene | gRNA sequence | Targeting region of ADAR1 or ADAR2 |
|--------------|-----------------------|---|---|
| ADAR1 g1 | ADAR1 | Fwd: CACCGTTATATCTCGGGCCTTGGTA Rev:AAACTACCAAGGCCCGAGATATAAC | Exon 2 |
| ADAR1 g2 | ADAR1 | Fwd: CACCGTGA CTCTCTGCCCTGAATT Rev: AAACAATTCAGGGCAGAGGAGTCAC | Exon 2 |
| ADAR1p150 g1 | ADAR1p150 | Fwd: CACCGCGTAGTTCTCATGCAGCGGA Rev: AAACTCCGCTGCATGAGAACTACGC | Upstream of exon 1A |
| ADAR1p150 g2 | ADAR1p150 | Fwd: CACCGCTTGGACCTTCGCCGCCGTC Rev: AAACGACGGCGGCGAAGGTCCAAGC | Downstream of exon 1A |
| ADAR1p110 g1 | ADAR1p110 | Fwd: CACCGCAA ACTCTCATCTAGAGGCC Rev: AAACGGCCTCTAGATGAGAGTTTGC | Upstream of exon 1B |
| ADAR1p110 g2 | ADAR1p110 | Fwd: CACCGTCCCGAGGAAGTGCAAGACC Rev: AAACGGTCTTGCACTTCCTCGGGAC | Downstream of exon 1B |
| ADAR1p110 g3 | ADAR1p110 | Fwd: CACCGAGAAGGACAGAGGCTCTTAC Rev: AAACGTAAGAGCCTCTGTCCTTCTC | Downstream of exon 1B |
| ADAR2 g1 | ADAR2 | Fwd: CACCGTGTGAAGGAAAACCGCAATC Rev: AAACGATTGCGGTTTTCTTCACAC | Exon 4 |
| ADAR2 g2 | ADAR2 | Fwd: CACCGTCTGGACAACGTGTCCCCCA Rev :AAACTGGGGGACACGTTGTCCAGAC | Exon 4 |

Table S1: Guide RNA (gRNA) sequences and targeting location, Related to Figure 1, 6, and S1