

**Supplementary Table 2.** Sequence information for top 12 potential off- target sites.

Sequence	Score	Mismatches	UCSC gene	Locus
GATCATTATGACGCTCAATTCAG	1.4	3MMs [5:9:10]	—	chr6:-107420885
TTTACTTAATAAGCTCAATTAAG	0.7	4MMs [1:2:4:12]	—	chr5:+17563880
GATGGTTAAGATGCTCAATTTAG	0.6	4MMs [4:5:10:12]	—	chr1:+160603090
CATACTTGATACACTCAATTCAG	0.6	4MMs [1:4:8:13]	—	chr1:-35319875
TAACCTAAATAAGCTCAATTTAG	0.5	4MMs [1:3:7:12]	—	chr10:-97184127
GATCAATCATAGGCTCAATTTAG	0.4	4MMs [5:6:8:12]	—	chr10:-67231029
CCTCCTTAATCAGCTCAATTGAG	0.4	4MMs [1:2:11:12]	—	chr16:+78469830
GATCTTAAAACTCTCAATTAAG	0.3	4MMs [5:7:10:13]	—	chr1:+192688201
CATCTTTAATTCTCTCAATTGGG	0.3	4MMs [1:5:11:13]	—	chr13:-44021747
TACCCTTAATTCACACTCAATTGAG	0.3	4MMs [1:3:11:13]	—	chr9:-103823359
AAACCTTAATAGGCTCTATTTAG	0.3	4MMs [1:3:12:17]	—	chr14:-121514294
TATCCTTTATATACTCAATTGAG	0.3	4MMs [1:8:12:13]	—	chrX:-66268442