

**Table S2 Potential off-target sites of TALEN-Rik2 and TALEN-Fus15.**

Locus	Chromosomal position	Target sequence A (5'-3')	Spacer length	Target sequence B (5'-3')	Dimer type
<i>C9orf72</i>	<i>Chr4:35218811-35218854</i>	T CTGTCTGGCAACAG	14	T GTCGACTATCTGCC	A-B
<i>Csmd1</i>	<i>Chr8:16813743-16813785</i>	T <b>CTAACTTGACAACA</b>	13	T <b>CTATCTAATTAAACA</b>	A-A
Intergenic	<i>Chr8:34491313-34491356</i>	T CTGTCT <b>CCACC</b> AG	14	T <b>ATCAACTACATAACC</b>	A-B
<i>Gfra1</i>	<i>Chr19:58314874-58314920</i>	T CTGT <b>GTTCA</b> CAAAG	17	T CTGT <b>CCTGACC</b> ACAG	A-A
Intergenic	<i>Chr9:112015226-112015268</i>	T CTGC <b>CTTGACA</b> ACCT	13	T <b>TTCAACTATGT</b> GCCC	A-B
Intergenic	<i>Chr19:4408724-4408766</i>	T <b>CAGCCTTGGCA</b> ACAT	13	T <b>CTCTTCCCAA</b> AAG	A-A
<i>Fus</i>	<i>Chr7:127981783-127981827</i>	T CTTTCAGGGGCGAGC	15	T AATATGGCCTCTCCC	A-B
Intergenic	<i>Chr4:149785023-149785065</i>	T <b>CATTCAAGCCGA</b> AAGC	13	T AATAT <b>GACAT</b> CTCCC	A-B
<i>Zdhhc5</i>	<i>Chr2:84705308-84705354</i>	T <b>CTATCAAAGGCA</b> ACC	17	T <b>AAGATGACCACTCCA</b>	A-B
<i>Sec23b</i>	<i>Chr2:144575630-144575674</i>	T CTTT <b>ACAGAACTA</b> AC	15	T <b>AAAATGACCTC</b> CCCC	A-B
<i>AC122296.2-201</i>	<i>Chr6:67120279-67120328</i>	T CTT <b>CCACAACCA</b> AAGC	20	T CTTT <b>CGGCCCA</b> AAGC	A-A
Intergenic	<i>ChrX:35868551-35868598</i>	T CTT <b>ACAAAGCCA</b> AAC	18	T <b>CATATAACTTCTCCA</b>	A-B

TALEN-Rik2 and TALEN-Fus15 binding sequences are shown in bold letters. Nucleotides of off-target sites matching the target are shown in black, mismatches in off-target sites are shown in red. A-B: heterodimeric target sequence, A-A: homodimeric target sequence.