

Supplemental Table 1: Primers for PCR amplification and sequencing for off-target analysis.

Off-target code	Primer Name	Primer Sequence (5' - 3')	Product size	Chromosome 17 locus
a	A For	ACCCACACTGGAGAGATACTG	382 bp	<i>Pacrg</i> , intron 4 (175kb intron)
	A Rev	CGTGGGAATGGGAACAGTAATG		
b	F For	CCCCTTCTGCTTGCTTCATAC	286 bp	Intergenic between <i>Cntnap5c</i> and <i>A330072L02Rik</i>
	F Rev	AGCTTGTTGCCCACTTGTAG		
c	B For	CCCTGTCTGAGCAGATGATTTAG	354 bp	<i>Zfp945</i> , Exon 1
	B Rev	CCTCTGACCTGGGAGGTTT		
d	G For	GGCAGGCTGGAAGGAAATAAG	704 bp	<i>Ndufv2</i> , Intron 2 (9kb intron)
	G Rev	GCAAACCAAGCCATCACTTTAC		
e	C For	AAACACCGGCCTCAGAAAG	365 bp	<i>Wiz</i> , Exon 7
	C Rev	AGCAGCACTCACTGTTGATATT		
f	H For	ATCCACTCTGTTGAGGGAAAG	274 bp	<i>Ptprm</i> , intron 15 (73kb intron)
	H Rev	AGTGGCCTTAGGAGGTAGAG		
g	D For	CAGACCCATCCTGTAGACTTG	1001 bp	Intergenic between <i>Mrpl14</i> and <i>Vegfa</i>
	D Rev	CTCAGGGTTACATGCCACTAC		
h	I For	GGGACCAAGGGAGTATTTATAG	473 bp	Intergenic between <i>Lrrc30</i> and <i>Lama1</i>
	I Rev	TCTCCTTTCTCCAATCTCTCCTC		
i	E For	CCTTTCTGGTGCTTCTCTTC	485 bp	<i>Tfeb</i> , intron 1 (45kb intron)
	E Rev	ACTCAAGCTGAAGGCCAAAG		
J	J For	GGGACCAAGGGAGTATTTATAG	502 bp	<i>Clip4</i> , intron 1 (20kb intron)
	J Rev	GTGCCAGAGATGGTTCTACAG		
K	K For	ACTCCCTAAGAAAGAAGAACAGTAAG	549 bp	<i>Prkce</i> , intron 1 (180kb intron)
	K Rev	GTTCTCAAGAGACACAAGGAG		