

Table S1**Primers used for cloning and amplification of fragments for sequencing**

Name	Sequence (5'-3')
GI04 attB1 F	GGGGACAAGTTTGTACAAAAAAGCAGGCTGG ATGGCCGCTACATGCGAG
GI04 attB1 R	GGGGACCACTTTGTACAAGAAAGCTGGGTG CCTTTCTCCATCCTCATGCCA
GI12 attB1 F	GGGGACAAGTTTGTACAAAAAAGCAGGCTGG ATGGCTTCTTCAAGCACAAGG
GI12 attB1 R	GGGGACCACTTTGTACAAGAAAGCTGGGTG GCCAGCCTTTTGTAGGTCAC
M13 Fw	GTAAACGACGGCCAG
M13 R	CAGGAAACAGCTATGAC
GI04 640-2070 F	TACTTCCGTTGGTGTGGTGG
GI04 640-2070 R	TGCAGCAACCAGGATGGATT
GI04 2000-3400 F	TCCTTTGCTTTCAAGAGGGAGT
GI04 2000-3400 R	AGCTTCCCACGTCAAACACT
GI12 630-2100 F	TGTGGCGGTGTTATGGGAAA
GI12 630-2100 R	ACGGCAGAATGAATCCCGTT
GI12 2030-3440 F	TCATGGATGAAGCCAAGCCT
GI12 2030-3440 R	AGCCGGCTATTAGCTTCCA
gRNA1	GAAGAAGCTCGTGCTTGAAT
gRNA2	CTGGTGTACTGTGCAGCTTC
gRNA3	TGCTGTGACAGAATTGCGAA
gRNA4	TCAGACTCGCTGGAAGCTGG
gRNA5	CCTCTGTGTAAGACTCCTATGA
gRNA6	AGCAATCTCACTAGAGTGTGAAC
gRNA7	GTAGACACTCCGGCAACCAT
gRNA8	CATCTAATGAGCTACGAAAC
P1	TGTCTGTCACACTCGGAGGA
P2	TTGACAAGGCCGAACCATT
P3	CTGAGCGGAAGTGCTTTCTG
P4	TGTATCTGGTGTAAAGGAACACA
P5	CTGCAGAATCCTTCCAAATCTATC
P6	AAGTGAGAATGGTCATGGGA
P7	TTGTCAACAAGGCTGAACCATT
P8	TCCAAAATGCCTGTCCTTTGT
P9	TGCATCTCGACTACTTTTTGTTA
P10	TCCGAGTATGAGAGACGGCA
P11	AATGGTTCAGCCTTGTTGACA
P12	GTTTCCCCGAGTCGTTGCAT
P13	CCCTGAGGTTGAATGGAGAA
P14	TCCTCCGAGTGTGACAGACA
P15	CCATTCAAGCACGAGCTTCTTT
P16	TTGGCATATGTGATTACCATTGTTAT
P17	AAGCAATTCTTCAGAGAACGTTC
P18	TCATAGGAGTCTTTACACAGAGG

AttB sequences are in red.

Table S2

Primers used for generation of gene editing constructs

gRNA name	Primer name	Sequence (5'-3')
gRNA1	eGI.04-43-DT1-F0	TGAAGAAGCTCGTGCTTGAATGTTTTAGAGCTAGAAATAGC
gRNA2	eGI.04-189-DT2-R0	AACCTGGTGTACTGTGCAGCTTCAATCTCTTAGTCGACTCTAC
gRNA1	eGI.04-43-DT1-BsF	ATATATGGTCTCGATTGAAGAAGCTCGTGCTTGAATGTT
gRNA2	eGI.04-189-DT2-BsR	ATTATTGGTCTCGAAACCTGGTGTACTGTGCAGCTTCAA
gRNA3	mGI.04-393-DT1-F0	TGTCGCAATTCTGTCACAGCAGTTTTAGAGCTAGAAATAGC
gRNA4	mGI.04-594-DT2-R0	AACCCAGCTTCCAGCGAGTCTGCAATCTCTTAGTCGACTCTAC
gRNA3	mGI.04-393-DT1-BsF	ATATATGGTCTCGATTGTCGCAATTCTGTCACAGCAGTT
gRNA4	mGI.04-594-DT2-BsR	ATTATTGGTCTCGAAACCCAGCTTCCAGCGAGTCTGCAA
gRNA5	eGI.12-106-DT1-F0	TGCATAGGAGTCTTTACACAGTTTTAGAGCTAGAAATAGC
gRNA6	eGI.12-193-DT2-R0	AACAGCAATCTCACTAGAGTGTCCAATCTCTTAGTCGACTCTAC
gRNA5	eGI.12-106- DT1-BsF	ATATATGGTCTCGATTGCATAGGAGTCTTTACACAGGTT
gRNA6	eGI.12-193- DT2 BsR	ATTATTGGTCTCGAAACAGCAATCTCACTAGAGTGTCAA
gRNA7	mGI.12-591-DT1-F0	TGTAGACACTCCGGCAACCATGTTTTAGAGCTAGAAATAGC
gRNA8	mGI.12-799-DT2-R0	AACGTTTCGTAGCTCATTAGATCCAATCTCTTAGTCGACTCTAC
gRNA7	mGI.12-591- DT1-BsF	ATATATGGTCTCGATTGTAGACACTCCGGCAACCATGTT
gRNA8	mGI.12-799- DT2 BsR	ATTATTGGTCTCGAAACGTTTCGTAGCTCATTAGATCAA

Coloured backgrounds indicate the targeted gene sequences. The letter in red is a modified nucleotide of the gene.