

ZK036

Target Position: exon 2

Sense Strand Sequence

gtcagGTGCAGACAGATGCACAGCAGGTCGCCTCTGATAAGTTCGTCTTCAATCTGTCGGATT
ATGAGCATGTCAATCATGTAGTGGTGTTCCTGCTGGGCACGGTGCCCTCCCGGAGGGCCT
AGGCGGCGCGGTGTACCTGTGTGTGCCGGGCGGGGCAGCGGGGCAGGTGTGGCAGCTGC
TGGGCTTCATACCAACGAGAAACCCAGCGCCATCTTCAGGATCTCCGGGCTGAAAGCAGgt
cagcagcagctccaccgctcaggagcagcg

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

ZK036a: 11bp deletion, 16bp insertion

CLUSTAL format alignment by MAFFT G-INS-i (v7.215)

```
WT          TGAGCATGTCAATCATGTAGTGGTGTTCCTGC-----TGGGCACGGTGCCCTTCCCGGAG
ZK036a      TGAGCATGTCAATCATGTAGTGGTGTTCCTACATGATTGACATGATTGCCCTTCCCGGAG
*****
*****,*      **, . *****

WT          GGCCTAGGCGGCGCGG
ZK036a      GGCCTAGGCGGCGCGG
*****
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ZK036b: 17bp insertion

CLUSTAL format alignment by MAFFT G-INS-i (v7.215)

```
WT          AGCATGTCAATCATGTAGTGGTGTTCCTGC-----TGGGCACGGTGCC
ZK036b      AGCATGTCAATCATGTAGTGGTGTTCCTGCTGTGTGTGTGCTGTGTGTGGGCACGGTGCC
*****
*****

WT          CTTCCCGGAGGGCCTAG
ZK036b      CTTCCCGGAGGGCCTAG
*****
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