

ZK045

Target Position: exon 2

atgtgtgactgctgctctttcgggctgcagTGGGTGTTGGCCAGTTCCTCCAGACGGCCGAGCTGCA
GGTGTTCCTGGGAGAGTCTGTGGTTCTGCCCTGCAATGGTTCTGGTTTCCAGC**GGACGAGC**
TGCAGGTTACTGGGAGGCCCTGGGAAAGACGTCCTCTCTCTGAATGGAGAGAACTGAG
CATCGGCAGAGGTTTTGAAGACCGGGTGAACCTCATCACAGATCCGGCAGTGACTCAAGATT
TCTCCATCATCCTGACAGACGTGATGCTGAACGATGGAGAGATTTACGAGTGTCTGTGGAAGG
GAACGATACCCATCTGCTCTGTCTTACTGTATGTGATGAgtaagtaccacaagaaacaataattattgg
gtcatttttaggtgcactttacaatgaggtagtagtagtgatgtatttactaacgtaacaattgcttcaggacttattcatct
ttatttaccagtaatggaaatagagttgttcgtaactcacagtgcatcaactaatgttaacaagcgtaaattggatttt
cacaatgcattaggttgcgttg

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

ZK045a: 8bp deletion

CLUSTAL format alignment by MAFFT FFT-NS-i (v7.215)

```
WT          TCTGCCCTGCAATGGTTCTGGTTTCCAGCGGACGAGCTGCAGGTTTACTGGGAGGCCCT
ZK045a      TCTGCCCTGCAATGGTTCTGGTTTCCAGCGGACGAGCTGCA-----GGGAGGCCCT
*****
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WT          TGGGAAAGACGTCCTCTCTCTGAAT
ZK045a      TGGGAAAGACGTCCTCTCTCTGAAT
*****
```

ZK045b: 4bp deletion,5bp insertion

CLUSTAL format alignment by MAFFT FFT-NS-i (v7.215)

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WT          GGTTTCCAGCGGACGAGCTGCAGGTTTA-CTGGGAGGCCCTGGGAAAGACGTCCTCTC
ZK045b      GGTTTCCAGCGGACGAGCTGCAGGACGAGCTGGGAGGCCCTGGGAAAGACGTCCTCTC
***** . * *****
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