

ZKO46

Target Position: exon 2

AGAGTGTT**CAGCCAATCCG**GACAAGAAAGAACCCAACGCGAATCCAACAACCACCACAGAG
ACTTCAGCCAACATCATCGAAATCTCCAATCCAAAAACCTCCTCCACATCCAAACGATCAGCTT
CCAAAAAGAGAAAATCTAGGTCTGAAGTCTTCGgaaaggaaatcacacaagtccagaacgaggagcaaac
gctccaaatcaaagtcgccaagaaaaagaggtcaag**ggctctcggttcgagGGCCAC**CAGGAATAAATCTCGAAC
TCCAGACAGAAGCAGACGCTCCAAATCGAGAAAGCGATCACGCTCACGTTTCGAGGAGGAGA
TCCCGGTCAggttcgagatggaggagagattcggaagtctgagtcagaggaccgatggaaaaggagcccagc
cgatctccggtgctcattctccggaagaaaagatccacatccagaactcgacgcagcacc**agcaagactcctccag**

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

ZKO46a: 7bp deletion

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

```
WT          AATCAAAGTCGCCAAGAAAAAGAGGTCAAGGTCTCGTTCGCAGGGCCACAGGAATAAAT
ZKO46a      AATCAAAGTCGCCAAGAAAAAGAGGTCAAGGTCTCGTTCGCAG-----GGAATAAAT
*****
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WT          CTCGAACTCCAGACAGAAGCAGA
ZKO46a      CTCGAACTCCAGACAGAAGCAGA
*****
```

ZKO46b: 5bp deletion,13bp insertion

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

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WT          AATCAAAGTCGCCAAGAAAAAGAGGTCAAGGTCTCGTTCGCAGGG-----CCACAG
ZKO46b      AATCAAAGTCGCCAAGAAAAAGAGGTCAAGGTCTCGTTCGCGTTGAGGGTTCCTCACAG
*****
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WT          GAATAAATCTCGAACTCCAGACAGAAGCAGA
ZKO46b      GAATAAATCTCGAACTCCAGACAGAAGCAGA
*****
```