

ZKO10

Target Position: exon 2

Sense Strand Sequence

tggttgccgctagtgatatttgaaattggtctgatgctggtgcaatagcattttcaaatattgtacttgactattaagaa
attaataagattgacaaaaacttctaatatagaggcatgagctgaaagatgccagactctgttttgatggacagtaaa
tgttttgtgcccgtctgaccggtgtgagtggtgtgtttacagGAGGAGCAGGAGTACATGGAGCTGGTGGC
GGCAGAGAAACACCAGCAGGAGGCGCTGAAAGTGGCGCAAGATCGAAACAAAACCTGTC
AGTGCTGGACGAGATCCTGGAGGATGTGAGGAAGGCTGCGGACCGCCTGGAGGAGGACA
TCGAGGAGCACGCCTTCGACAACAACAAACAGgtgcactaacacaa

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

ZKO10a: 10bp insertion

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

```
WT          TGGAGCTGGTGGCGGCAGAGAAACACCAGC-----AGGAGGCGCTGAAAGTGGCG
ZKO10a      TGGAGCTGGTGGCGGCAGAGAAACACCAGCTGAAAGTAAAGGAGGCGCTGAAAGTGGCG
*****
```

```
WT          CAAGATCGAA
ZKO10a      CAAGATCGAA
*****
```

ZKO10b: 14bp deletion

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

```
WT          AGCAGGAGTACATGGAGCTGGTGGCGGCAGAGAAACACCAGCAGGAGGCGCTGAAAGTGG
ZKO10b      AGCAGGAGTACATGGAGCTGGTGGCG-----GCAGGAGGCGCTGAAAGTGG
*****
```

```
WT          CGCAAGATCGAAAC
ZKO10b      CGCAAGATCGAAAC
*****
```