

ZKO23

Target Position: exon 2

Sense Strand Sequence

aatacctcgatttagtggctattaaagtatctattatatacttgtagattgtacagcattttatattcacattagtcacattgacagatgtatacttttagttgtgtagtttacaagtcacaattaactcatattaaagtgcaatttatgattataaagttatagtagtatttttaaatgcacatttttaataaaaaggataaataactgaaagtggtgtgtgtgattgacagCTGTC
AAAGACGGCTCATGATCTGAGTAATA TGGCCAGTATTTATCTGGTGGATGTGCGACTCAGCTC
CAGTTTACAGCAGATACTTTGACATCAGCTTTATCCCTCCACCGTGTCTTCTTCAACGGAC
AGCACATGAAAGTGGATTATGGgtgagttctgatcaatgtt

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

ZKO23a: 2bp deletion, 10bp insertion

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

```
WT          ACAGCTGTCAAAGACGGCTCATGATCTGAG-----TAATATGGCCAGTATTTATCTG
ZKO23a      ACAGCTGTCAAAGACGGCTCATGATCTGAGCCAGTATATGATATGGCCAGTATTTATCTG
*****
*.*
```

```
WT          GTGGATGT
ZKO23a      GTGGATGT
*****
```

ZKO23b: 2bp insertion

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

```
WT          ACAGCTGTCAAAGACGGCTCATGATCTGAGTA--ATATGGCCAGTATTTATCTGGTGGAT
ZKO23b      ACAGCTGTCAAAGACGGCTCATGATCTGAGTATGATATGGCCAGTATTTATCTGGTGGAT
*****
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