

ZKO1007

Target Position: exon 2

Sense Strand Sequence

```
ACACTCCACCACGACAAGAA GATCTTCTGCGCCAGATCTGGTCTGCAGATCAGCAGCTCATG
TACCGCTCCTACTTCTTTCATCTTCATCGTGGAGTTTCTGGGGCCCGTGGCCACCATGTCGG
TCTGTTACGCGCGGATTTCAAAGGAGCTTTGGTTTAAGAATGTTCCCGGATATCCAACGGAGC
AACTTCGGAAGCGTCTACGACGGCGGCGCAGAACAGTCGTGGCACTAATCGCGGTTTTGGTG
GCGTACGTGCTGTGCTGGGCGCCGTATTACAGTTTCACATTGCTACGAGATTTTTACCCGGCG
CTGATCACGCGAGGGCGGAATTCTCTGGTCGTTTTTACATCATCGAATGCATCGCTATGAGCA
ACGGTGTCAATAACTCTGTGCTTTGTGAGCGTTAGGAATAATGCAGTGAAGTGGCTCAGAG
CGGTAA
```

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

ZKO1007a: 20bp deletion

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

```
WT          GCTCCTACTTCTTTCATCTTCATCGTGGAGTTTCTGGGGCCCGTGGCCACCATGTCGG
ZKO1007a    GCTCCTACTTCTTTCATCTTCATCGTGGAGTTTCTG-----GG
*****                                          **
```

```
WT          TCTGTTACGCGCGGATTTCAAAGGAGCTTTGGTTT
ZKO1007a    TCTGTTACGCGCGGATTTCAAAGGAGCTTTGGTTT
*****
```

ZKO1007b: 6bp deletion, 2bp insertion

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

```
WT          GCTCCTACTTCTTTCATCTTCATCGTGGAGTTTCTGGGGCCCGTGGCCACCATGTCGG
ZKO1007b    GCTCCTACTTCTTTCATCTTCATCGTGGAGTTTCTGGGGCCCGTGGAC----TGTCGG
***** *          *****
```

```
WT          TCTGTTACGCGCGGATTTCAAAGGAGCTTTGGTTT
ZKO1007b    TCTGTTACGCGCGGATTTCAAAGGAGCTTTGGTTT
*****
```