

ZKO20

Target Position: exon 3

Sense Strand Sequence

tgacgtctgagcatttccttaatgactgcctgacagACATCAGCATCTGGCTGAACCAGGCGGTTAAAGGT
GTTTCGAGATCGCGATGGGAACGCAGTGCAGAACGCTCACTGCTCACGCTCTTCCACCGCCT
CTGTAAACTACTGTTCTTCCGCATCAGACCTGTGTTTGTGTACGATGGAGACGCGCCGCTGCTC
AAGAAGCAGACCCTGgtgagatccacaaaacacacacatctcaacatcaacatttactctcagtcagttcatt
ctgtcttcatgagtcataagaaaataaataaatatagtgacattcctctatgtgatctttaagaca

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

ZKO20a: 9bp deletion, 4bp insertion

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

```
WT          GATGGGAACGCAGTGCAGAACGCTCACCTGCTCACGCTCTTCCACCGCCTCTGTAAACTA
ZKO20a      GATGGGAACGCAGTGCAGAACGCTCACCTGCTC-----TTCACACCGCCTCTGTAAACTA
*****
                .*. *****
```

```
WT          CTGTTCTTCCGCATCAGACCTGTGTTT
ZKO20a      CTGTTCTTCCGCATCAGACCTGTGTTT
*****
```

ZKO20b: 10bp deletion, 5bp insertion

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

```
WT          GATGGGAACGCAGTGCAGAACGCTCACCTGCTCACGCTCTTCCACCGCCTCTGTAAACTA
ZKO20b      GATGGGAACGCAGTGCAGAACGCTCACCTGCTC-----TTCAAACCGCCTCTGTAAACTA
*****
                .*. *****
```

```
WT          CTGTTCTTCCGCATCAGACCTGTGTTT
ZKO20b      CTGTTCTTCCGCATCAGACCTGTGTTT
*****
```