

## ZKO103

Target Position: exon 1

Sense Strand Sequence

agcttcataaagcaggccgtcaatcacggtagttTCTCACTATCTGCAGCTTCCGGTTTCACTCTGGACTCC  
AGCGAGCGCGAACTCGGGAAAACCTTTCCTACTATCTCGACTTTTCTCGTGAACCCAGGACTGTT  
TACATCAGTTAAATGTGCAGTTTGGATTAATACCGGACTCTTCTTTCCTCATGGATGTTATAT  
CGTTTACTCGAGGGCTGTAGTAGCTCTTCAGAGAGGAGGAAGATCACCTGTAACAGTTGACC  
AATGACACCTGTTGTCTCTGCGGCGTTTCGCTTTAAGAGAAGCTGCGATATAAACAAAGCCTCG  
AAGATATTTAACGTTTAATGACGCATTTAAGATGAAGGTGACGGTCATTTTCGGGGAAACTA  
GAGTTGTCGTCCCGTGAAGG

Uppercase: intron/noncoding sequence

Lowercase: exon/coding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

### ZKO103a: 1bp deletion

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

```
WT          ATATCGGTTTACTCGAGGCTGTAGTAGCTCTTCAGAGAGGAGGAAGATCACCTGTAACAG
ZKO103a     ATATCGGTTTACTCGAGGCTGTAGTAGCTCTTCA-AGAGGAGGAAGATCACCTGTAACAG
*****
```

### ZKO103b: 11bp deletion

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

```
WT          CACTCATGGATGTTATATCGGTTTACTCGAGGCTGTAGTAGCTCTTCAGAGAGGAGGAAG
ZKO103b     CACTCATGGATGTTATATCGGTTTACTCGAGGCTGT-----AGAGAGGAGGAAG
*****
```

```
WT          ATCACCTGTAACAGTTGACC
ZKO103b     ATCACCTGTAACAGTTGACC
*****
```