

ZKO16

Target Position: exon 13

Sense Strand Sequence

tgtgcatacacctattggttacacaatggagaccaggaggtgtgtattagtgtcccccttattcagtgtctcctctgtctgc
gcagGGACCCCAACACCATATTCAGAGGGAACCTCGCTCACGTCCAAGTGCATCGATGAGACTAT
GAAGCTGGCGGGGATGCATTACCTGCGCGTCACACTGAAGCCCATCATCGATGAGgtgggtctat
ctccatctataatgcaggatatctgaacgccggttcaccgtgtttctattttacctgtagATCTGCAGCGACCACAA
ACCCTGCGAGATCGACCCCGTCAAGCTGAAGGAGTCTGGAGAATCTGGACACAAACA GGgtga
gcgtcaacttctgttcctcaaaccaaacagtttccaatgcatgtaatgtgagattatgggtttaataatgttcggtgtaaca
tttacttatagacaaaactatttgccttttgtgatgta cagtacaaaagacaaatgaaatgag

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

ZKO16a: 4 bp deletion

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

```
WT          GAAGGAGTCGGAGAATCTGGACACAAACAGGgaaaacctgcgtcagta
ZKO16a      GAAGGAGTCGGAGAATCTGGACACAA----Ggaaaacctgcgtcagta
*****
*****
```

ZKO16b: 2 bp insertion

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

```
WT          GAAGGAGTCGGAGAATCTGG--ACACAAACAGGgaaaacctgcgtcagta
ZKO16b      GAAGGAGTCGGAGAATCTGGACACACAGACAGGgaaaacctgcgtcagta
*****
*****.*****
```