

## ZKO748

Target Position: exon 1

Sense Strand Sequence

**gacgcaacaAAGAGCGACAG**CGGAGGGCCCTGCTAACAGCGTGGCTTACTATAGCTTTAAGA  
ACTTTAAATAGGCTCTGGGTCTTTAAAATGAATTTGCACAGTTATTATAGGGAGAATAGAC  
TAAGTTTAAAGATTTACGCTACTTGCATTTTTGCACCAAATTTGCAAAGGAAGTACGAGCGTC  
CACTAAATATGTTTGTCAATCGTATCGGGGCGGTTAGCCAGCCAACATTTTTTCATAATTAAT  
GCCTCTCTTTATTTCACTACGATTCAATTTGTTGAGAATTTCTGAGGTTTTTCGGAAATAA  
GAGGAAAAAACTTCGGTAGTGATGGAGCCGCAGCTCTCGAGCAACAAAGAGGAGACGGA  
GAGCGAGACGGCCATAGAGAAATCCGCGGGGACAGAGTACCGCATCCAGCCCGTGCAGGGC  
ATCCAGAGGACGCGGAGACGGGTGCTTCAACACCGAAGTGACCTGCCACCCGAAACCAAT  
GGAGCCGCGACAAGCGCCACGGGATCAGGAAG**GGTTTTACGGGACAGGTCAACG**CGGAC  
GATCCCGTGTGGAGGCAGACTGACATCAGCGAGGACCTGGCTGAAGTGTACGGGACGC  
GTCAGGGAACCGCCGGAGGAAAGCGAAGTGCCGCGGCGCAGGAAGAGCCAGCAGCCG  
CCGACGCTCATCGGATGCGGGCAAAGACAGCGGCGGAGACTGCGACCTGCTGGATGAgta  
cgtgcccttctgtgtatttttagtgctaaataacaaggcctcgtttgtgcagatcctactaatgatgcttagcagttttgtga  
gtgtgttc**ctgtcacattcagtcgtaat**

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

**atcg** : Forward/Reverse primer

**atcg** : cas9 target site

### ZKO748a: 9bp deletion

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

```
WT          GGGATCAGGAAGGGTTTTACGGGACAGGTCAACGCGGACGATCCCCGTGTGGAGGCAGAC
ZKO748a     GGGATCAGGAAGGGTTTTACGGGACAGGT-----CGATCCCCGTGTGGAGGCAGAC
*****
```

```
WT          TGACATCAG
ZKO748a     TGACATCAG
*****
```

### ZKO748b: 1bp insertion

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

```
WT          GGGATCAGGAAGGGTTTTACGGGACAGGTC-AACGCGGACGATCCCCGTGTGGAGGCAGA
ZKO748b     GGGATCAGGAAGGGTTTTACGGGACAGGTCAAACGCGGACGATCCCCGTGTGGAGGCAGA
*****
```