

## ZKO909

Target Position: exon 1

Sense Strand Sequence

aaagtgccttcactagacagaatGGCAGAATTCGACCAACAGCATGATGAACCTGCACTCTTCACTAA  
AGTAACTGTTTATTCTCTGCTCGCCTGTGTGGCTCAGTTTGCTGTCGGCTTTGCCCTTCGCTCAA  
AAATGGGGCCATAAATGTTGACGCGTTGACCGGTGGGTCCTCGTGTGGTTATTTACGACGCA  
ATAGTTCATTTACTCTGtaggtacacaagtgcctgtagaaatggtgttatctgactgtcacttacctgttcacctt  
gactgtgcaggaaggaccattcgtctacatgtcgctgttgaaatgtggcgtcctcagacaacctgctggcagagttatgt  
gagtattctgatacaactacaatattaattacatctacagttttattgattatttggcatggagaaaatcttgatgtgaa  
attagtagagggcgacatctagtgggtttgttggtata

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

### ZKO909a: 7bp deletion

CLUSTAL format alignment by MAFFT L-INS-i (v6.850b)

```
WT          TTTGCCTTCGCTCAAAAATGGGGCCATAAATGTTGACGCGTTGACCGGTGGGTCCCTCGTG
ZKO909a     TTTGCCTTCGCTCAAAAATGGGGCCATA-----AGCGGTTGACCGGTGGGTCCCTCGTG
*****
*****
```

```
WT          TGGTTA
ZKO909a     TGGTTA
*****
```

### ZKO909b: 1bp deletion, 5bp insertion

CLUSTAL format alignment by MAFFT L-INS-i (v6.850b)

```
WT          TTGCCTTCGCTCAAAAATGGGGCCATAA----TGTTGACGCGTTGACCGGTGGGTCCCTC
ZKO909b     TTGCCTTCGCTCAAAAATGGGGCCATAAGCGGTTGTTGACGCGTTGACCGGTGGGTCCCTC
*****
*****
```

```
WT          GTG
ZKO909b     GTG
***
```