

## ZKO229

Target Position: exon 1

Sense Strand Sequence

TACAAAGGAGGCAAGAAAGGACACGCGAGGGAATTCGCTGCTCAAGTGGACAAACAAAAC  
CTTACAGTACACCATGCCCGCTCAAATAAAGACGACGGAGGATGGAAGAAGTTTGTATGGA  
ATTCGGAGAAGAAGGAATTTCTA**GGACGTACCGCGGGAGTTG**GGgtgagtataccgtacagatgt  
aaaatcgtcgtattcagcacgtcggacagcgcagtgatgcctgtcaccgccgtttctatagcagcgggtaccacagtct  
gccagtcgtgacgatgcaacctgtatgattgactttgcagcaaagtctcgcggactttcatatgtcgacatacaagatt  
tgcctgatcaactgatgtgtttgttcgttcaaagcatttctgattaagtagcgcgtattttaggcgtttgtcag**cgctcacct**  
**gtttcgttga**

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

**atcg** : Forward/Reverse primer

**atcg** : cas9 target site

### ZKO229a: 2bp deletion

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

```
WT          AAGAAGGAATTTCTAGGACGTACCGCGGGAGTTGGGGTGAGTATAACCGTACAGATGTAA
ZKO229a     AAGAAGGAATTTCTAGGACGTACCGCGGGAG--GGGGTGAGTATAACCGTACAGATGTAA
*****
```

```
WT          AATCGC
ZKO229a     AATCGC
*****
```

### ZKO229b: 8bp insertion

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

```
WT          AAGAAGGAATTTCTAGGACGTACCGCGGGA-----GTTGGGGTGAGTATAACCGTAC
ZKO229b     AAGAAGGAATTTCTAGGACGTACCGCGGGAGGTATAACCGTTGGGGTGAGTATAACCGTAC
*****
```

```
WT          AGATGTA AAAATCGC
ZKO229b     AGATGTA AAAATCGC
*****
```