

## ZKO219

Target Position: exon 6

### Sense Strand Sequence

GTTTCTTTCTACACGGgtgagttttaagatccgctcacagacaatattcacaagtaaaggagcatgaagtgttcagcagatctgc  
catgtgtttctgtagGCATGGCTAGCTTGTACTCCATGGCACTGGTGGTTTCAGCCTGGGTGTGGAGGATAAGGA  
GTGAAAGAGAAGGAGATGAAGAGAAAGAAGGAGAAGAAGCTCCAGCAAACATCTCATTGTgtaagtacaat  
ttcttctgagaaactgtattaatgtatataatggaattggttttttgttcagctattactactctcacattgttttttattttttttaca  
gGGCACATTATATATTTACTGGTGGAGTCGATACTTTTTGGAGTTTTTGTCTTGGTAATATTTTATGACCAGg  
tatgctcca

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

### ZKO219a: 7bp insertion

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

```
WT          CTGCCATGTTGTTTCTGTAGGCATGGCTAGCTTGTACTCCATGG-----CACTGGTGG
ZKO219a     CTGCCATGTTGTTTCTGTAGGCATGGCTAGCTTGTACTCCATGGTGTACTCCACTGGTGG
*****
```

```
WT          TTCAGCCTGGGTGTggaggata
ZKO219a     TTCAGCCTGGGTGTGGAGGATA
*****
```

### ZKO219b: 1bp deletion, 18bp insertion

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

```
WT          CTGCCATGTTGTTTCTGTAGGCATGGCTAGCTTGTACTCCATG-----
ZKO219b     CTGCCATGTTGTTTCTGTAGGCATGGCTAGCTCGTACTCCATGTACTCCATGTACTCCAC
*****
```

```
WT          GCACTGGTGGTTTCAGCCTGGGTGTggaggata
ZKO219b     ACACTGGTGGTTTCAGCCTGGGTGTGGAGGATA
.*****
```