

ZKO169

Target Position: exon 4

Sense Strand Sequence

```
TGGGACCTTCAGAGCGTAGTGACTCTAGACGGCGTCGGTGAACCCGAGGACCGAGCTCATGT
GCAGCTCAAACGCATCCAGTCGCCGTCATCCTCCTACTGTTCCAAAGATGAAGCAGCGCT
GGTTATGGAGGAAGCCCGTTCGCTAGGGCTCACAGGGGCTGGCTTTGTGTGGATTGTTCTA
GCCTGACGACAGGGAATCTCGAACATATCCCGGAAGCCTTCCGGCAGGGATGATATCTGTGA
CCTATGATGAATGGGATTATCCCCTGGAGACTCGCCTGCAGGATGCTGTGGGAATTATCAGTTC
GGCAGCCGCTGCCATGTTTCAGAGAAGAAGGCCGGATACCTGATG
```

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

ZKO169a: 4 bp deletion

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

```
WT          GCAGCGCTGGTTATGGAGGAAGCCCGTTCGCTAGGGCTCACAGGGGCTGGCTTTGTGTGG
ZKO169a     GCAGCGCTGGTTATGGAGGAAGCCCGTTC-----GGGCTCACAGGGGCTGGCTTTGTGTGG
*****
```

ZKO169b: 16 bp deletion

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

```
WT          CCAAAGATGAAGCAGCGCTGGTTATGGAGGAAGCCCGTTCGCTAGGGCTCACAGGGGCTG
ZKO169b     CCAAAGATGAAGCAGCGCTGGTTATGG-----AGGGCTCACAGGGGCTG
*****
```

```
WT          GCTTTGTGTGGATTGT
ZKO169b     GCTTTGTGTGGATTGT
*****
```