

ZKO617

Target Position: exon3

Sense Strand Sequence

```
cagatgtagggtgatgtagtgcacatccttgaccatgttgtatcaaagtcacacatattgttaaataagtcagctcactttgttagttttatttc
tggtgtctgttgcaatgtcttttcagGTGTAGAAAAGCTTGTAATCACCTACACAAGCATGGCATCCCTATTGCTGTT
GGCACAAGCTCAGCAGGTCTGACCTTTGAGATGAAGACCAGCCGTCATAAAGAGTTCTTTAGCCTCTTCAGT
CACATTGTGCTTGGAGATGATCCGGACGTAAAAAATGGCAAGCCACTCCCTGATACTTTTTTGGTGTGTGCC
AAAAGATTCTCTCCCCAGCCAACCCCTAACAGgtaggatgaagctactcagctattgcattctattcagctcagctctataataatt
ttatggaagcag
```

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

ZKO617a: 28bp insertion

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

```
WT          AGCCACTCCCTGATACTTTTTTGGTGTGTGCCA-----
ZKO617a     AGCCACTCCCTGATACTTTTTTGGTGTGTGCCAAAAAAGCATTGCCAAAAAAGCATGTGC
*****
```

```
WT          -AAAGATTCTCTCCCCAGCCAACCCCTAACAGgtaggatgaagctact
ZKO617a     CAAAAATTCTCTCCCCAGCCAACCCCTGAACAGgtaggatgaagctact
***.*****.*****
```

ZKO617b: 2bp deletion

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

```
WT          AGCCACTCCCTGATACTTTTTTGGTGTGTGCCAAAAGATTCTCTCCCCAGCCAACCCCTA
ZKO617b     AGCCACTCCCTGATACTTTTTTGGTGTGTGCCAAA--ATTCTCTCCCCAGCCAACCCCTA
***** *****
```

```
WT          AACAGgtaggatgaagctactca
ZKO617b     AACAGgtaggatgaagctactca
*****
```