

ZKO210

Target Position: exon 4

Sense Strand Sequence

tgcttcagtatatcttcttcatgttcaacagaagaaagaaactcaaacaggtttggaacaagtgaggatcagtaaata
tgtcagaatttcattttgggtgaactgccctttaaagagatcttctcattcttcagGATGCAGCACGAGA**GG**
CTACACGTGAAGCACAGAGGTCATGAGGCCATGCATGCAGAGATGGTCCTGATTCTCATCGCT
ACGCTAGTGGTCGCACAGATTGTCCTGGTTCACTGGAAACAAGACTGCAGATCCTACAAT
gtgagtgatatcaattaaagggatagttcacacaaaaaggaaaattctgtcaacattaaggctgattatact**gatctgt**
tgcttacacaca

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

ZKO210a: 8bp deletion

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

```
WT          GGATGCAGCACGAGAGGCTACACGTGAAGCACAGAGGTCATGAGGCCATGCATGCAGAGA
ZKO210a     GGATGCAGCACGAGAGGCTACACGT-----GAGGTCATGAGGCCATGCATGCAGAGA
*****
```

```
WT          TGGTC
ZKO210a     TGGTC
*****
```

ZKO210b: 4bp deletion, 6bp insertion

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

```
WT          GGATGCAGCACGAGAGGCTACACGTGAAG--CACAGAGGTCATGAGGCCATGCATGCAGA
ZKO210b     GGATGCAGCACGAGAGGCTACACGTGATGGCCTCAGAGGTCATGAGGCCATGCATGCAGA
***** * * *****
```

```
WT          GATGGTC
ZKO210b     GATGGTC
*****
```