

ZKO220

Target Position: exon 1

Sense Strand Sequence

TGACAAACATCAGCATCAGGATTTAGTTGCAGATTTTGTGCCCGTTTACGGTATGGCTGACGG
GGAACGATCACCTTTACTATTGGACGGTCGCGATGGAATGACGGGACTGTCACTGGGAGACG
AGCCC TACCGACCGATCAGCAAACC GCAGAgtgagtcaaacatgatccagattgacactggctgtaattac
agcatgttcatttgctatccacagtatattgaacatagcgaattgtaaagtactatttagatccactggcaatgatgccta
cgctcacgttatctgaataagcaggattgagaatcctgcggttatgaattgtgttcatttattgtacacaccgcacagtg
agtgcataatgtgatcatgtggttcaatgtgcagtaatc

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

ZKO220a: 13 deletion

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

```
WT          GCGATGGAATGACGGGACTGTCACTGGGAGACGAGCCCTACCGACCGATCAGCAAACCGC
ZKO220a     GCGATGGAATGACGGGACTGTCACTGGGA-----GACCGATCAGCAAACCGC
*****
```

```
WT          AGAGTGAGTCAAACATG
ZKO220a     AGAGTGAGTCAAACATG
*****
```

ZKO220b: 8 deletion

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

```
WT          GCGATGGAATGACGGGACTGTCACTGGGAGACGAGCCCTACCGACCGATCAGCAAACCGC
ZKO220b     GCGATGGAATGACGGGACTGTCACTGGGAGACGAGC-----CCGATCAGCAAACCGC
*****
```

```
WT          AGAGTGAGTCAAACATG
ZKO220b     AGAGTGAGTCAAACATG
*****
```