

ZKO172

Target Position: exon 2

Sense Strand Sequence

```
cttcgatcagagctttatctgatgtttcaaactctttgtcctttttacacacagTCTGCACAGAATCAATCGTCTATGCTTTAAGAT
CATGGAGGAATGTCATGAGTGGGCTTCAGTTCAGAATGGTCCATCACAATGACAACGGCCATACAAATGCAC
CACCCAAATCCGCAGAGCCTCCGAAACCCTGCTCCGTCCCACCAACACACTTTACCCCTTCCGGGACCAGC
AGGAATGCAATCTTATCAAACAGGCTGTGGTTTACTTGACTCACAGTGGATTTTACTGGGGCCCTTTGGATG
TGGACGAAGCTCATGCGAGACTGGCGAATCTCCCTTGGGACGTTCTGATTCCGGACAGCATGCAGGCC
AACGTTTTCTCACGCTCAGCTATCGGGCTCCTGAAGGCCCGACCAGTGTTCCGAGTGCTGCTGAAGAACGA
```

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

ZKO172a: 7 deletion

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

```
WT          TCCATCACAATGACAACGGCCATACAAATGCACCACCCAAATCCGCAGAGCCTCCGAAAC
ZKO172a     TCCATCACAATGACAACGGCCATACAAATG-----CAAATCCGCAGAGCCTCCGAAAC
*****
*****
```

```
WT          CCTGCTCCGTCCCACCAACACACTTT
ZKO172a     CCTGCTCCGTCCCACCAACACACTTT
*****
```

ZKO172b: 18bp deletion , 4bp insertion

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

```
WT          TCCATCACAATGACAACGGCCATACAAATGCACCACCCAAATCCGCAGAGCCTCCGAAAC
ZKO172b     TCCATCACAATGACAACGGCCATACAAATGCACCACCGCAG-----GAAAC
*****
*****
```

```
WT          CCTGCTCCGTCCCACCAACACACTTT
ZKO172b     CCTGCTCCGTCCCACCAACACACTTT
*****
```