

## ZKO1002

Target Position: exon 2

Sense Strand Sequence

actgttgcatgtcacagctaacatgttcacacaaatgaaaaagaattagacaaaattccataaagatgtacacgg  
atataaactcttattttttatagCTGAGTTCAAAACCTCCAACACGTCCAGCAAGAGGTTCAGTTCAGAA  
GACTGATCCCCGATGACTCCCCCAGCAATGACCCTGACTGCCATCAGGACATTGTATGGGACA  
CAACATCTCCATCACCCATTCGGCATGgtacgtgtgtctgctagaattgtgcatccttaaaggggacctattatg  
taacagtttacaacatttaaagagtctctgatgtccatagggcagtggttccaaacctgttctgaaggcacaccaaca  
gtacacattttcaacctaataacacaccggaatcaactcaactcatcagaacataagaagagactccaaaatctgagtt  
aagggct

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

### ZKO1002a: 4bp deletion

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

```
WT          CAGAAGACTGATCCCCGATGACTCCCCCAGCAATGACCCTGACTGCCATCAGGACATTGT
ZKO1002a    CAGAAGACTGATCCCCGATGACTCCCC-----ATGACCCTGACTGCCATCAGGACATTGT
*****
```

### ZKO1002b: 22bp deletion

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

```
WT          CAGAAGACTGATCCCCGATGACTCCCCCAGCAATGACCCTGACTGCCATCAGGACATTGT
ZKO1002b    CAGAAGACTGATCCCCGATGACTCCCC-----CAGGACATTGT
*****
```

```
WT          ATGGGACACAACATCTCCATCACCCATTC
ZKO1002b    ATGGGACACAACATCTCCATCACCCATTC
*****
```