

## ZKO215

Target Position: exon 1

Sense Strand Sequence

CGTGGCTCATCTTATTCCTGATATCTTACCGGTCTGGACCACCGACCAGAAAGCTATTCAGAAGATGGTGACC  
AACAAACCGGTTGATTTAGGGGTAATTGCCAAAAAGCTAGCGTCCGCGTGGACTCGGTGGAGGACTTTGC  
TTATGGAGCAGAGATTCTGGTTAACCA**TATGGACAAGGTGTGTAGCC**GGGCAGCATTCGAAGGTGAGGAAG  
TGGCCAGGAGAGCTGAGAAGCTCTGTGGGTCTGTGGTTTACAGTCTGCTGTGGTACAACACTGTGAACATTAC  
GTCATGTACTG**CAGATACGGCACTAGCATGA**

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

**atcg** : Forward/Reverse primer

**atcg** : cas9 target site

### ZKO215a: 1bp deletion

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

```
WT          TTATGGAGCAGAGATTCTGGTTAACCATATGGACAAGGTGTGTAGCCGGGCAGCATTCGA
ZKO215a     TTATGGAGCAGAGATTCTGGTTAACCATAT-GACAAGGTGTGTAGCCGGGCAGCATTCGA
*****
```

### ZKO215b: 4bp deletion, 5bp insertion

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

```
WT          TTATGGAGCAGAGATTCTGGTTAACCAT-ATGGACAAGGTGTGTAGCCGGGCAGCATTCG
ZKO215b     TTATGGAGCAGAGATTCTGGTTAACCATGGTTAAACAAGGTGTGTAGCCGGGCAGCATTCG
*****.*.******
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