

## ZKO422

Target Position: exon 2

Sense Strand Sequence

gtatcgctgattggctgtaggagcagctccggttcagtttgctaacagttataacctaacgtaatacaggactgaactattaa  
cgtaaaggttttctttaaacaacttaacgttgaaggttgcctgcattacgatatgatgttcaatgttaacgtgtagttga  
aaacatagttgccgctggttacttagcaacgctgtctatctttctttctttccagctgtataaagttgtaggaattcac  
taataagctttccttgactgtttataagACTTCACTGTCCAGGCATAATCCCGAGAAGAAGGACTTTT  
TAGGAAGAACAGCAGGGAAGTTGGTCATGTATTCTTTTCAGAAA**GGACATCCCAGGAGCCA**  
**GAG**AGGGCCAGAAGAAGATCACGGCAAACAGAAGTTATTCGGGATGGCTAAGTCTTTACC  
TGTGGATA**CAACTGTCCCTCCTTCTCTG**

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

**atcg** : Forward/Reverse primer

**atcg** : cas9 target site

### ZKO422a: 3bp deletion, 2bp insertion

CLUSTAL format alignment by MAFFT G-INS-i (v6.850b)

```
WT          GTATTCTTTTCAGAAAGGACATCCCAGGAGCCAGAGAGGGCCAGAAGAAGATCACGGCAA
ZKO422a     GTATTCTTTTCAGAAAGGACATCCCAGGAG-AGGAGAGGGCCAGAAGAAGATCACGGCAA
***** . . *****
```

### ZKO422b: 5bp deletion, 3bp insertion

CLUSTAL format alignment by MAFFT G-INS-i (v6.850b)

```
WT          GTATTCTTTTCAGAAAGGACATCCCAGGAGCCAGAGAGGGCCAGAAGAAGATCACGGCAA
ZKO422b     GTATTCTTTTCAGAAAGGACATCCCAGGAG--AAGGAGGGCCAGAAGAAGATCACGGCAA
***** * . *****
```