

## ZKO108

Target Position: exon 3

Sense Strand Sequence

GCCCGATGACTGGAAGgtaaacctggatgtttaagagctctttaatcagttgtacacatgctgaaatctgaacatca  
atggctgatatacagtaacgtagtcaacatttgaagtgggtcatgaccttcatcattcagaacacccattttgttttagga  
aagtttaaaaaaaaaaagatccacattgaatgttgactactgtgttttattcattgtgcttcatctgtctgtgtagAA  
ATGGCTGGAGGACACCTGCGCATCTATTGGCTGGAAACTCAAGCTCTCCTCTAGTATGGAG  
GGAGCTGATTGATCGTGGTGGGAAAGGCATGCTGCTCGGAGGATTAGTATTTCCTGGAGC  
ATGCTCAGgtttgattgggttactaaaataaaacatcatttttaatgttaatacaataaccattttgaaaaaaaaatgt  
aatatagctatagacaagtaaattaggattgttgcaaaaattggcacatctgctgct

Uppercase: exon2 sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

### ZKO108a: 11bp insertion 6bp deletion

CLUSTAL format alignment by MAFFT G-INS-i (v7.215)

```
WT          gtgtagAAATGGCTGGAGGACACCTGCGC-----ATCTATTGGCTGGAAACTCAAGCT
ZKO108a     gtgtagAAATGGCTGGAGGACACCTGCGCTGGAAGGTGGCTGGCTGGAAACTCAAGCT
*****
. . . *****
```

### ZKO108b: 1bpinsertion 27bp deletion

CLUSTAL format alignment by MAFFT G-INS-i (v7.215)

```
WT          gttttattcattgtgcttcatctgtctgtgtagAAATGGCTGGAGGACACCTGCGCATCT
ZKO108b     gttttattcattgtgcttcatctgtctgtgtagAAA-----
*****
```

```
WT          ATTGGCTGGAAACTCAAGCTCTCCTCTAGTATGGAGGGA
ZKO108b     --AGGCTGGAAACTCAAGCTCTCCTCTAGTATGGAGGGA
*****
```