

## ZK0890

Target Position: exon 9

Sense Strand Sequence

gtaaaaatggctcaagtgccgaacaaaattgctaacaaaaaacctgtaaatataaataagctcaaacaaaacaataa  
cacattacgaaaaatataaacgtagtactagaataaagccttgatggtgatgatattgattgattgtgtgtatgtgtgtgc  
acagTCCAGAGA **GATGGAGATTGCCGTGTA**CTGGAGAGACTACCGCTCTCTGTGTGCGCTGAA  
ATTTCTCAAGCTGGAGGATTTCTTGGACAACCAGAAACACAAAGTACAACCTAGAGCTAGAAC  
CACAGGGACTGCTGCTGGCAGAGgtgcacactcaacataacatgtttcctgtgtgtataaagagagaaatcac  
atcacagccaaatcaataaatgtgctgtaatcatcagtgttcaccaatgggctgagtgtatatgtgtaccatctgtttgct  
cagGTTACTTTCTTTAA **CCCTGTGATTGAGAGGGTTCCAC**

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

**atcg** : Forward/Reverse primer

**atcg** : cas9 target site

### ZK0890a: 1bp deletion, 5bp insertion

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

```
WT          gcacagTCCAGAGAGATGGAGATTGCCGTG----TACTGGAGAGACTACCGCTCTCTGTG
ZK0890a     GCACAGTCCAGAGAGATGGAGATTGCCGTGGGGAGACTGGAGAGACTACCGCTCTCTGTG
*****
```

### ZK0890b: 47bp deletion, 12bp insertion

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

```
WT          tgtgcacagTCCAGAGAGATGGAGATTGCCGTGTA TACTGGAGAGACTACCGCTCTCTGTG
ZK0890b     tgtgcacagTCCAGAGAGATGGAGATTGCC--ATACTGGAGA-----
*****
```

```
WT          GCGCTGAAATTTCTCAAGCTGGAGGATTTCTTGGACAACCAGAAACA
ZK0890b     -----TTGCTGGAGGATTTCTTGGACAACCAGAAACA
*****
```