

## ZK0970

Target Position: exon 2

Sense Strand Sequence

ctctgtgcagtgattggctc aaatctgttcattctgtctcctgatagGTGGTCCCGACAGATGTCCTCATCCAATG  
GTCTGTGTCGGTACGGCGGCCGCATTGACTGCTGCTG GGGCTGGACGAGAGTCTCTGGGG  
CCAGTGCCAGCgtgagtacagtatctgctgctggagggtgaactgggctacagggggcagcattagggggcttcta  
gaattcagtgatgctaagccttctccagccacttaacca cagcacagcaagtcaccaat

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

### ZK0970a:10bp deletion

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

```
WT          GCATTGACTGCTGCTGGGGCTGGACGAGAGTCTCCTGGGGCCAGTGCCAGCGTGAGTACA
ZK0970a     GCATTGACTGCTGCTGGGGCTGGACGAGAGT-----CAGTGCCAGCGTGAGTACA
*****
```

```
WT          GTATCTGCTGCT
ZK0970a     GTATCTGCTGCT
*****
```

### ZK0970b:5bp insertion

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

```
WT          TGA CTGCTGCTGGGGCTGGACGAGAGTCTC-----CTGGGGCCAGTGCCAGCgtgagtac
ZK0970b     TGA CTGCTGCTGGGGCTGGACGAGAGTCTCTGACACTGGGGCCAGTGCCAGCgtgagtac
*****
```