

## ZK067

Target Position: exon 2

Sense Strand Sequence

cacaataaaagcctcaccttgatcgattgcaactgtatcatttgaattatgctcattaaatggttgctaacacagtttcatg  
ttgacataattgaaagtgtattgatataagggtgatcaataactccctgttgtgttgggtgtttccagGTTTATGCA  
GCTGCCGGTCAGTTTCGGTGTCTGGG**GGCCCTTTGCTCCGGGTGGA**GGGCCAGCCACTGTC  
CATCCGCTGTGATGTGTCCGACTATGAGGGCCCCAGAGAGCAGGACTTTGAATGGACTGTAA  
CACGAGAAACAAAACCATCAACGTGATCTCCACATTCGATCCTGCATTCTCAGACCGCTCTCT  
ACAGGACCGCATAAAGACCGGCGACATTAGCATAGCACGACTTGCGGACAATGTAGTGGAAC  
TGAGGATTCAAGAGGCTCAAATTAGCGACAGCGCCACCTATCGATGCAGTACTCCAAGCACA  
GA**CTCGGTGATAAGCGGAAACT**

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

**atcg** : Forward/Reverse primer

**atcg** : cas9 target site

### ZK067a: 20bp deletion

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

```
WT          TGCAGCTGCCGGTCAGTTTCGGTGTCTGGGGCCCTTTGCTCCGGTGGAGGGCCAGCCA
ZK067a      TGCAGCTGCCGGTTCGGTGTCT-----TGGAGGGCCAGCCA
*****
*****
```

```
WT          CTGTCCATCCGCTGTGATGT
ZK067a      CTGTCCATCCGCTGTGATGT
*****
```

### ZK067b: 1bp insertion

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

```
WT          TTTCGGTGTCTGGGGCCCTTTGCTCCGGG-TGGAGGGCCAGCCACTGTCCATCCGCTGT
ZK067b      TTTCGGTGTCTGGGGCCCTTTGCTCCGGTGGAGGGCCAGCCACTGTCCATCCGCTGT
*****
```