

## ZK037

Target Position: exon 2

Sense Strand Sequence

gtgcagGATGATGCGGTCAGCGTG GAGAGCGGCACACACCCCGAGCGTCCCGACACTCCCAC  
CAACACAGCGAGCGCTCCGGGCAGGAAGAGCTGGGGGAAGGGGAAGTGGAAAGTCCAAGA  
AGTGCAAATACTCCTTCAAGTGTGTGAACAGCCTAAAGgtgaggccgctgctgcctgtgtagtgtgc  
actagtgagggtgtgtgacctg

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

### ZK037a: 10bp deletion

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

```
WT          gtgcagGATGATGCGGTCAGCGTGGAGAGCGGCACACACCCCGAGCGTCCCGACACTCCC
ZK037a      gtgcagGATGATGCGGTCAGCGTGGAGAGCGGCACAC-----TCCCGACACTCCC
*****
```

```
WT          ACCAACACAGCGAGCGCT
ZK037a      ACCAACACAGCGAGCGCT
*****
```

### ZK037b: 5bp deletion

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

```
WT          TCAGCGTGGAGAGCGGCACACACCCCGAGCGTCCCGACACTCCCACCAACACAGCGAGCG
ZK037b      TCAGCGTGGAGAGCGGCACACACCCCGAG-----CGACTCCCACCAACACAGCGAGCG
*****
```