

## ZK0611

Target Position: exon 2

Sense Strand Sequence

ttacagAATCCTAACTGACAGATTTAATGATGACGACATCATGGAGTGATCGACTTCAGGACTAT  
GCAGACCTCCCGGCAAACATGGACGGCCTGGCGATGAAGAAATACAGGAGAGAGGCCTATC  
ATAGgtaaatacagacaaataaatggaccatttaatatagctgttataaaattgggtcgctaggcttagaaagatggattagt  
ccatttaaattcagggacatcgtgtactctgaaggaaagtgcatttttagatttgacaaatactttatttctttctgtttaga  
agaagtggcatttgttgcagtcacacattttagaagagctgatgcagtttgagagttacaatag

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

### ZK0611a: 1bp deletion ,9bp insertion

CLUSTAL format alignment by MAFFT G-INS-i (v6.850b)

```
WT          TGATCGACTTCAGGACTATGCAGACCTCCCG-----GCAAACATGGACGGCCTGGCG
ZK0611a     TGATCGACTTCAGGACTATGCAGACCTCCCATGGACTATGCAAACATGGACGGCCTGGCG
*****.*****
```

```
WT          ATGAAGAAA
ZK0611a     ATGAAGAAA
*****
```

### ZK0611b: 7bp deletion

CLUSTAL format alignment by MAFFT G-INS-i (v6.850b)

```
WT          TGGAGTGATCGACTTCAGGACTATGCAGACCTCCCGGCAAACATGGACGGCCTGGCGATG
ZK0611b     TGGAGTGATCGACTTCAGGACTATGCAGAC-----CAAACATGGACGGCCTGGCGATG
**********
```

```
WT          AAGAAAT
ZK0611b     AAGAAAT
*****
```