

ZK0234

Target Position: exon 1

Sense Strand Sequence

```
cttctccagattcctgacagcttgtttcccctatcacaacagtctcagactgtctcgtcccgggtgcATTCACAAAA  
ATTCAGTCTGGATCTGAGGTTTCTGTTTACAGGGCGTTGGTGAGGGCTCCTTCCTTTT  
CTGTTTATAAAATTGTAGGATTAAGGACTCCACGTTTCGCTTGATCTTATGTCATGGCCGAAG  
CAGTGAACCCACAGGACCAATGGGAGGAAGTTTTGAGGACGAATTCGGAGAAATCATCAA  
AACTCGATCAGgttggagaaattatctttaattttgtctattaagaacactttaaaattttgtttgtttaattgcaa  
aatctaactaaataattgtgttttttggggaggacaacttaattgtttatgtacaatccacttaaatgtgtaaaagtatt  
aagttaacttaattgtgtgggacaacatgatgtttacagcgaatttcaaaccgacttagtcaaatag
```

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

ZK0234a: 8bp insertion

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

```
WT          GATCTTATGTCATGGCCGAAGCAGTGAA-----CCCACAGGACCAATGGGAGGAAGG  
ZK0234a     GATCTTATGTCATGGCCGAAGCAGTGAACCTTGCTCCCACAGGACCAATGGGAGGAAGG  
            *****  
WT          TTTTGAGG  
ZK0234a     TTTTGAGG  
            *****
```

ZK0234b: 4bp deletion, 8bp insertion

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

```
WT          GATCTTATGTCATGGCCGAAGCAGTGAAC----CCACAGGACCAATGGGAGGAAGGTTTT  
ZK0234b     GATCTTATGTCATGGCCGAAGCAGTGAATTAAGTTGCAGGACCAATGGGAGGAAGGTTTT  
            *****  
WT          GAGG  
ZK0234b     GAGG  
            ****
```