

## ZK0252

Target Position: exon 1

### Sense Strand Sequence

gaatgctaacaagggggagagagagtacatgtccacggcgagcggaaaggtggggggttcaacagcgagatatggag  
aaatacaattaacctgcaatgtgccaacgccaactcacgccgatcataaccatcctcaccaccgatcatcatcatca  
tcctcacctcatcaccaccaccagcagcaacggcgaccgacctgtcttttttcctaagaagtgaatgtatcggga  
ctgcatgggatctttcttgacaATGGAGATTGAGAATATCGTGGCCAACACCGTGCTGCTGAAGGC  
GAGGGAAGgtaagatggcgactcgttatccttaatcgagcccgcgttattaactttatcgcgtctattggctcta  
tccacattgccacatctgtatacagcttgaaggcgtttcgggagtcctcccttgaatagcatctcattagtagtctag  
tacgacttcccaggctctgtct

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

### ZK0252a: 2bp deletion, 10bp insertion

CLUSTAL format alignment by MAFFT FFT-NS-i (v7.215)

```
WT          acaATGGAGATTGAGAATATCGTGGCCAACACCGTGCTGCTG-----AAGGCGAGGG
ZK0252a     acaATGGAGATTGAGAATATCGTGGCCAACACCGTGCTGCGAGGGAAGGTAAGGCGAGGG
*****
```

```
WT          AAGgtaagaga
ZK0252a     AAGgtaagaga
*****
```

### ZK0252b: 21bp deletion, 13bp insertion

CLUSTAL format alignment by MAFFT FFT-NS-i (v7.215)

```
WT          acaATGGAGATTGAGAATATCGTGGCCAACACCGTGCTGCTGAAGGCGAGG-GAAGgtaa
ZK0252b     acaATGGAGATTGAGAATATCGTGGCCAACG-----TGAAGTCGAGGTGAAGgtaa
*****
```

```
WT          g
ZK0252b     g
*
```