

## ZK0320

Target Position: exon 5

### Sense Strand Sequence

ccacctcaactcaaactgcttcatagtctctagtagtcttgaacaccttggatcagttgtgtttgattagggttgaagcaa  
aactgtgcagagctgccgctctccaggaatggattttgacacctatTTTTAAGTAATTTGATGATGTGACCAAAATCGCTG  
atgtattatTTTTTTTTTGGCGTCTAGGATAGCACTGAAGTCAGGGTATGGGAAGTATTTGGGTATAAA  
CTCAGAGGGAGTTGTTGTTGGCCGATCAGATGCCATAGGCTCCAGAGAGCAGTGGGAACCA  
GTGTTTCAAATgtaagtgaatctgccgagtcacaacgaaatacctctcaaatgtggagagaaactctgaagat  
ggtacattggccaagtcttaattatgtttctacctttgttttgttctgtcctttagGGTAAAATGGCCTTGCTTG  
CTGCAAACAGTTGTTTCATCTCGTACAGTGAGAGCGGAGACATCGTGGCCAAAAACAAGACA  
GCTGGAGAGGAGGAAATGATCAAGgtgaatcatttctcaattcacaatccacccaacatcaatggctgaagg  
ac

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

### ZK0320a: 16bp deletion

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

```
WT          AGGGAGTTGTTGTTGGCCGATCAGATGCCATAGGCTCCAGAGAGCAGTGGGAACCAGTGT
ZK0320a     AGGGAGTTGTTGTTGGCCGATCAGATGC-----CAGTGGGAACCAGTGT
          *****

WT          TTCAAATGTAAGTGA
ZK0320a     TTCAAATGTAAGTGA
          *****
```

### ZK0320b: 23bp deletion

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

```
WT          ACTCAGAGGGAGTTGTTGTTGGCCGATCAGATGCCATAGGCTCCAGAGAGCAGTGGGAAC
ZK0320b     ACTCAGAGGGAGTTGTTGTTGGCCGAT-----CAGTGGGAAC
          *****

WT          CAGTGTTCAAAATGTAAGTGAA
ZK0320b     CAGTGTTCAAAATGTAAGTGAA
          *****
```