

ZK0218

Target Position: exon 1

Sense Strand Sequence

gcaaacctgaagaactttaacctgaccaccactaaaactttacatgctgtgttaattatttattgattataatTTTTacacattatttgc
agccacctacatccgctagggggcggcagcgcgaatccactgacgcgctcttctctgtttatcatcatctttacttctcttgcgaatcAT
GGCGGTGCACGGCCCGGTGCGTGA AAAATCCACCC**GGTGGTTTTGGCTTCGATTG**TGGACTCATACGAGCGCA
GGAATGAAGGAGCGAGTCGCGTGATCGGGACATTATTAGgtgggtcattgaattctgtgtgagattatgagacagttgcg
attattacaacaacatgagcgtcg

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

ZK0218a: 2bp deletion

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

```
WT          TCGTGAAAATCCACCCGGTGGTTTTGGCTTCGATTGTGGACTCATACGAGCGCAGGAATG
ZK0218a     TCGTGAAAATCCACCCGGTGGTTTTGGCTTCGA--GTGGACTCATACGAGCGCAGGAATG
*****
```

```
WT          AAGGAG
ZK0218a     AAGGAG
*****
```

ZK0218b: 4bp deletion

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

```
WT          TCGTGAAAATCCACCCGGTGGTTTTGGCTTCGATTGTGGACTCATACGAGCGCAGGAATG
ZK0218b     TCGTGAAAATCCACCCGGTGGTTTTGGCTTC----GTGGACTCATACGAGCGCAGGAATG
*****
```

```
WT          AAGGAG
ZK0218b     AAGGAG
*****
```