

ZK027

Target Position: exon 1

Sense Strand Sequence

acttagactaattcaatctgaggctatcagcctttttatatataatttttatatcaatgtaatcaaatgtataaacacac
ttaattgtttgtttgtgtgtgtatgtgtgtgctgagtttaagATGAAGCCAGCGGAGGGTCTGG
AAGGGCCTCCACA CGGGGCCCCAGAGGAGCTGCGGAGAGAAAAGCACACAAAACACGCC
AAgtaagacacagaggaacacaatacactttatttactgcattatttcctcttacaactcctatgggaagtgtatta
gacataatgcagacaacaaactgcaaaagacaaactgactagcctgcgttatcgaacaacaacaatagtggtact
tgaacaagcattatataatataatgtttccagctgtgatggcagacctttacacaaatctaccaaccacctattg
cgtt

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

ZK027a: 11bp deletion

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

```
WT          AAGATGAAGCCAGCGGAGGGTCTGGAAGGGCCTCCACACGGGGCCCCAGAGGAGCTGCG
ZK027a      AAGATGAAGCCAGCGGAGGGTCTGGAAG-----GGGGCCCCAGAGGAGCTGCG
*****
```

```
WT          GAGAGAAAAGCAC
ZK027a      GAGAGAAAAGCAC
*****
```

ZK027b: 13bp deletion

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

```
WT          GATGAAGCCAGCGGAGGGTCTGGAAGGGCCTCCACACGGGGCCCCAGAGGAGCTGCGGA
ZK027b      GATGAAGCCAGCGGAGGGTCTGGA-----GGGCCCCAGAGGAGCTGCGGA
*****
```

```
WT          GAGAAAAGCAC
ZK027b      GAGAAAAGCAC
*****
```