

ZK0977

Target Position: exon 1

Sense Strand Sequence

ATCTGCATCCGCATCTCCTCCACCGCATGAAGGCATCGAGATGGAAAAAATGCATCATGAAGA
AGTGGGCCCTCGGAGTGCCCGATGAGACCCCTCCTCTCCGCCAACCTCCAGCTCCAGACAGG
CATGGAGCCG **GGACAACCCAGGGTTCGAGC** CGGAGGAGGGGATGATGGAGGCGGACTGGC
CCCCGGAGAGTCAGGGCCGGAGGTCTGTGTCCACGACGTCCAGCAGCAGCAGCGGGCGGCG
TCCCGGGAACTTCTCCGGTATCAGTGCGCGGATCAACAGAGGACTTTACCCGACTCCTCCA
GCACAAGAGCACCGCAGC **TGTGGGAAGAGGATACTG**

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

ZK0977a: 5bp deletion

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

```
WT          AGCTCCAGACAGGCATGGAGCCGGGACAACCCAGGGTTCGAGCCGGAGGAGGGGATGATG
ZK0977a     AGCTCCAGACAGGCATGGAGCCGGGACAACCCAGGGT-----CGGAGGAGGGGATGATG
*****
```

```
WT          GAGGC
ZK0977a     GAGGC
*****
```

ZK0977b: 7bp deletion, 3bp insertion

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

```
WT          AGCTCCAGACAGGCATGGAGCCGGGACAACCCAGGGTTCGAGCCGGAGGAGGGGATGATG
ZK0977a     AGCTCCAGACAGGCATGGAGCCGGGACAACCCAGGGT----GGAGGAGGAGGGGATGATG
***** * *****
```

```
WT          GAGGC
ZK0977a     GAGGC
*****
```