

ZKO64

Target Position: exon 2

Sense Strand Sequence

AAAAAGCTGCAGATATCAGATGGGCCTTTACCTCCAGTAATGGAACTCAGCTGAATGGAAA
AAAGGATCCAGGAGAAAACCTCCAGCAGGATTAACAATAGAAGAAGACGGATCTTTACGATT
TATAAGTGTGATCAGAGTAACACCGGCACATATAAATACAAAGCTTTTAATGCCAATGGCCAA
CAGATTGGGGATGAACTGTGGAAGTAAAGTTTATGgtgagaagacaatttttaagccttccaacat
aataactacaatcttctgcaatatttttactatataacactgtacatttctgtaggagtttgtgaatctgcaaataacatcat
gtttctgttacagcgaagactcctaacctactgtgaagcgtgaatgcac

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

ZKO64a: 1bp deletion, 8bp insertion

CLUSTAL format alignment by MAFFT G-INS-i (v7.215)

```
WT          ACCGGCACATATAAATACAAAGCTTTAATGCCAATGGCCAACAGA-----TTGGGGA
ZKO64a      ACCGGCACATATAAATACAAAGCTTTAATGCCAATGGCCAACAGAGATGAACTGGGGA
*****
.*****
```

```
WT          TGAAACTGTGGAAGTAAAGTTTATGGTG
ZKO64a      TGAAACTGTGGAAGTAAAGTTTATGGTG
*****
```

ZKO64b: 5bp deletion

CLUSTAL format alignment by MAFFT G-INS-i (v7.215)

```
WT          ACCGGCACATATAAATACAAAGCTTTAATGCCAATGGCCAACAGATTGGGGATGAACT
ZKO64b      ACCGGCACATATAAATACAAAGCTTTAATGCCAATGGCC-----ATTGGGGATGAACT
*****
*****
```

```
WT          GTGGAAGTAAAGTTTATGGTG
ZKO64b      GTGGAAGTAAAGTTTATGGTG
*****
```