

ZKO613

Target Position: exon 3

Sense Strand Sequence

catattcgtctgtgattgtagtagagtcattgagactgcttctgaaacccaacctctgctgtctgttcacagGCCTGG
AGCCATGCAAAGACTCCTGGGAGTTGAAAGACGGACCTTGTGAGATTATGTGAGgtacagac
cgcagcattctaacagatctagtagtttctgggatgtgctcttaactggtaaaaaaaatccaacacaaaatgactgacc
ctggtgtctggtttccaagtattaatcctcattgttttctgacagacttggctaccatataagtggctactattgttcag
aatgataatgttctgctctgatcttcttttaaacagtctgagaatttctttgaacattcctcgttggctataatcctgttattgt
ggcgttctctacattttaaactcttggcctagtgtcatcaagcttttctgtttctttggctataatgcactattgaggga
ttggggacttaaacaagtgaatattagtgctttatttggcagcaatgattgggacctcatcatcattttagactgtataa
aaataagcagcattcaatccgctcattcaccacatgcaaattgtgaatcaacataagttgaaagtagtgccaaagaca
ataaaagccaggtttcaagccaactaaagacactata

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

ZKO613a: 9bp deletion

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

```
WT          ccaaacctctgctgtctgttcacagGCCTGGAGCCATGCAAAGACTCCTGGGAGTTGAA
ZKO613a     ccaaacctctgctgtctgttcacagGCCTGGAGCCATGCAAA-----GAGTTGAA
*****

WT          AGACGGAC
ZKO613a     AGACGGAC
*****
```

ZKO613b: 3 bp deletion, 42 bp insertion

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

```
WT          ccaaacctctgctgtctgttcacagGCCTGGAGCCATGCAAAG-----
ZKO613b     ccaaacctctgctgtctgttcacagGCCTGGAGCCATGCAAAGCCATGCCTGGGAGTTG
*****

WT          -----ACTCCTGGGAGTTGAAAGACGGAC
ZKO613b     CCTGAGAGCCATGCCTGAGAGCCATGCCTGGGAGTTGAAAGACGGAC
                *. *****
```