

## ZKO1116

Target Position: exon 3

Sense Strand Sequence

ttcgttcttactgcaactgcaagaaaaaaaaaatctgacaaatgttttctttaacttctgttaactacattttttaagctac  
gcaaagttcaacctaataatagtcagtttaactgatgtaagttgaggtgacaagaaaagttcatttgattcaactaaaa  
atattagggcagcaggaattatattttacaatgtgtgtgtgtgtgtgtttctcttagACAAATGCTACATGTTGA  
GTAAAGGCCTGAAGCGGAAACTGGAGGACGAGGACGAGCCAGAAGTGAGTAATAATGGC  
TCCAGTCTGGACGAGTCTGAGTCCGAGTCCTCCAGCGGCTACAGACTCCAGCGGCAGACGG  
TGCTCAATCTTCCCTGCTGAAGCTCCACAGCGTCCCGGGACACTCAGAGCCACGTCTGTCC  
CGCCGGGTGCTCATCTCCAACACCCTCCGACACATCAGGGATGAGCTGCGGGTGGAGGGC  
GGCGTAGTGTCCGTCTGCAACCCTCTATCACTAAGGACGCTTTCAGCTC

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

### ZKO1116a: 4 deletion

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

```
WT          ACGAGCCAGAAGTGAGTAATAATGGCTCCAGTCTGGACGAGTCTGAGTCCGAGTCCTCCA
ZKO1116a    ACGAGCCAGAAGTGAGTAATAATGGCTCCA----GGACGAGTCTGAGTCTGAGTCCTCCA
*****
*****
```

### ZKO1116b: 10 deletion

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

```
WT          GACGAGCCAGAAGTGAGTAATAATGGCTCCAGTCTGGACGAGTCTGAGTCCGAGTCCTCC
ZKO1116b    GACGAGCCAGAAGTGAGTAATAATGGCTCC-----AGTCTGAGTCCGAGTCCTCC
*****
*****
```

```
WT          AGCGGCTACA
ZKO1116b    AGCGGCTACA
*****
```