

## ZK0581

Target Position: exon 1

Sense Strand Sequence

ctgtctttgcagTGAGGTCTCCTGTTTATAACTATGATGAGTCCTGATTTAGACCTGAACTTCTCTTC  
CAACTGCAACTTGTATGATCATCGTCCAGTGGCCCGGTTTCATACCACTGGTCTACTCCATCA  
TATGTCCAGTGGGACTCTTAGGAAATGCTCTGGCTCTCCATGTGGTGATCTCCAGCACCA  
AAATTAATTCAATCACGCTTTATTCCGCCAACCTGGCTGTGTCTGATATCCTATTCTGCCTGTCG  
CTTCTCTACGAGCTGTTTACTATGGATTGGGTTTCCACTGGCCGATGGGAGAAGTACTGTGTA  
AAGCCATAGCACTGCTCTTCTATTTGAACTGCTACGCTGGTGTGAACTTCATGACATGTCTGGC  
GGTGGACCGTTTTGTGGCGCTAGTGTTCCTGCTAGACTGGCAAACCTGAGAAAGGCAAAA  
AATGTACGCTTTGTGTGTCTGGCAATATGGCTGCTGGTGTCTGGCCAGACGCTGCCCTGCTA  
ACAATCGGCCTTACTAAAACCGAGCCTGACAGCA

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : cas9 target site

### ZK0581a: 5bp deletion

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

WT	CGGGTTCTCATACCACTGGTCTACTCCATCATATGTCCAGTGGGACTCTTAGGAAATGCT
ZK0581a	CGGGTTCTCATACCACTGGTCTACTCCATC-----TCCAGTGGGACTCTTAGGAAATGCT
	*****
WT	CTGGC
ZK0581a	CTGGC
	*****