

## *cdc6*<sup>tsu21cd/+</sup> (CZRC catalog ID: CZ406)

### Nature of the mutation

In the wild-type *cdc6* coding sequence, AAGCAGCGCTGCGCTCCTCTG is deleted in exon 2. The mutated *cdc6* codes for a truncated protein containing 554 aa, of which 361 aa are identical to wildtype *cdc6*.

### Sense Strand Sequence

agGTGATGAGAATGGCTGTAACCTGCCAGCCTCCATGCTTGGCTCTCCCCCTAAGCAG  
CGCTGCGTCTCTGTGCTCCCCTCGCAAGCTGTCTTCAACGAGAACACACCAGTCC  
TCTCTCACCTCCCCGTCCTATCCTGTCCTCGCACAAAGTTCCTCTGTCTCCATTCT  
CGTCCATCGCCAACGACTGAACGAGACATCATGCACCAACATAATCCCCCGTACA  
GAGGGAAGGAGCCCTGTTACGCGACTGTTTCCTATAAAGA

**Uppercase:** Exon/coding sequence

**Lowercase:** intron/noncoding sequence

**atcg:** Forward/Reverse primer

### Genotyping assay

#### Primers:

**CZ406\_WT\_forward:** 5' GCTTGGCTCTCCCCCTAAGCA 3'

**CZ406\_Mu\_forward:** 5' GCTTGGCTCTCCCCCTCTCT 3'

**CZ406\_reverse:** 5' AGGAAACAGTCGCGTAACAG 3'

#### PCR program:

95°C 5min

95°C 30 sec

58°C 30 sec

72°C 30 sec

72°C 8min

4°C hold

} 30 Cycles

**Product size: WT 229 bp; Mu 208bp**

## The sequencing results of the CZ406:

CLUSTAL format alignment by MAFFT FFT-NS-i (v7.397)

```
WT          gGTGATGAGAAATGGCTGTAACCTGCCAGCCTCCATGCTTGGCTCTCCCCCTAAGCAGCGC
CZ406       gGTGATGAGAAATGGCTGTAACCTGCCAGCCTCCATGCTTGGCTCTCCCCCT-----
*****

WT          TGCGCTCCTCTGTGCTCCCCTCGCAAGCTGTCCTTCAACGAGAACACACCAGTCCTCTCC
CZ406       -----TGCTCCCCTCGCAAGCTGTCCTTCAACGAGAACACACCAGTCCTCTCC
*****

WT          TCACCTCCCCGCCTATCCTGTCTCGCACAAAGTTCCTCTGTCTCCCATTTCTCGTCCA
CZ406       TCACCTCCCCGCCTATCCTGTCTCGCACAAAGTTCCTCTGTCTCCCATTTCTCGTCCA
*****
```

## Reference:

Yao Lk, et al. Human Molecular Genetics 26:4168-4180