

## *sec14l8*<sup>tsu16/+</sup> (CZRC catalog ID: CZ403)

### Nature of the mutation

In the wild-type *sec14l8* coding sequence, GACATGAGCG is deleted in start codon. The mutated *sec14l8* codes for a truncated protein containing 341 aa, of which 395 aa are identical to wildtype *sec14l8*.

### Sense Strand Sequence

ccagcggcggagataaaatcgaactggtggcggggctaaaacatcaccgcagagtctgtcattcagtctctgtgatttgagacactAT  
TTCTGCTGCACTCGTGGCGACATGAGCGGAAGGGTTGGAGATCTGAGCGTGAAGCAA  
GCCGAAGCTTTGCCCAGgtaaatctattttctattatatacagcagtaaggctatgttgatgttgaggactcgtgcct  
gaagaggacgggatgaaatattgtcccagccaagactgaggccacaaccgcagattcagtcagaataaaaccctcagctgtatttaatta  
gtgtatttagattgcagcttaacacacagtttagactgtgtcaattccgtaacagtaagcgctcacgttccattgctgtctgcatagatgt

**Uppercase:** Exon/coding sequence

**Lowercase:** intron/noncoding sequence

**atcg:** Forward/Reverse primer

### Genotyping assay

#### Primers:

**CZ403\_forward:** 5' ccagcggcggagataaaatc 3'

**CZ403\_reverse:** 5' acatctatgacagacagcaatg 3'

#### PCR program:

95°C 5min  
95°C 30 sec  
58°C 30 sec } 30 Cycles  
72°C 30 sec  
72°C 8min  
4°C hold

**Product size: 426 bp**

## The sequencing results of the CZ403:

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

```
WT          ATTTCTGCTGCACTCGTGCCGACATGAGCGGAAGGGTTGGAGATCTGAGCGTGAAGCAAG
CZ403       ATTTCTGCTGCACTCGTGCC-----GAAGGGTTGGAGATCTGAGCGTGAAGCAAG
*****

WT          CCGAAGCTTTGGCCCAG
CZ403       CCGAAGCTTTGGCCCAG
*****
```

## Reference:

"Gong, B., Shen, W., Xiao, W., Meng, Y., Meng, A., and Jia, S. (2017). The Sec14-like phosphatidylinositol transfer proteins Sec14I3/SEC14L2 act as GTPase proteins to mediate Wnt/Ca<sup>2+</sup> signaling. *Elife* 6.