

## *npc1*<sup>ihb335/+</sup> (CZRC catalog ID: CZ1237)

### Nature of the mutation

Between 84 bp to 90 bp of the wild-type *npc1* coding sequence, GTATCTG is deleted in exon 2.

### Sense Strand Sequence

aaagtgattacaacatagattattgtccaacagagcattcttttgtgtacagacattttaaagactttaaggcttatgtttgatggtaaatac  
catcaaatctcctgtgtgattattttgttgttgttgttgtgtgttcactcagGTGCATGGCCAGCACTGTATCTGGT  
ACGGCGAATGTGGGAACTCCCCAAACGTCCCAGAAAAGAAGTTGAACTGCAATTA  
CACCGGTCCTGCTGTGCCTCTGCCTAATGAAGGACAGGAGCTGCTGCAAGtatgacaatc  
cactttt

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : Crispr/cas9 target site

### Genotyping assay

#### Primers:

*npc1*\_forward2: 5' TAAAGTGATTACAACATAGA 3'

*npc1*\_reverse2: 5' AAAAGTGGATTGTCATACCT 3'

#### PCR program:

95°C 5min

95°C 30 sec

55°C 30 sec

72°C 30 sec

72°C 8min

4°C hold

} 30 Cycles

Product size: 299 bp

### The sequencing results of the CZ1237:

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WT          GTGCATGGCCAGCACTGTATCTGGTACGGCGAATGTGGGAACTCCCCAAACGTCCCAGAA
CZ1237      GTGCATGGCCAGCACT-----GTACGGCGAATGTGGGAACTCCCCAAACGTCCCAGAA
*****

WT          AAGAAGTTGAACTGCAATTACACCGGTCTGCTGTGCC TCTGCCTAATGAAGGACAGGAG
CZ1237      AAGAAGTTGAACTGCAATTACACCGGTCTGCTGTGCC TCTGCCTAATGAAGGACAGGAG
*****

WT          CTGCTGCAG
CZ1237      CTGCTGCAG
*****
```

### Reference:

Lin Y, Cai X, Wang G, Ouyang G, Cao H. Model construction of Niemann-Pick type C disease in zebrafish. *Biol Chem.* 2018 Jul 26;399(8):903-910.