

ush2a^{hzu6/+} (AB) (CZRC catalog ID: CZ 262)

Nature of the mutation

Between 136 bp to 162 bp of the wild-type *ush2a* coding sequence, GCCCCTCAGGGCAACTT, is deleted.

Sense Strand Sequence

attaagctgcgctgccttacc~~caaggca~~ctggactgtaaaaatgtcaccaccggcATGACCATCATTAC
TTATTTAAGATCACTACATCAGGAGGCAACCTCGCCACCAACAACGAA
TTGGCTCCTTGGGCACAAAGGTGCTATGTTATTACTGTACACCTTGGG
CTTTTATGCCTCCCTCAGCCTGGTTGCCCTCAGGGCAACTTCCCCAG
GCTCGAGAACATAGGGGCACATAAATCTGTCAGCACCACACCAGCGA
GAGCCACGTGCGGGATTCCCGAAAGGAGTACTTTCTGTCAAGCTGGC
CAGGTTCAGGAAGATCTCCTCACTTGCATCCAGAAGTTCTGCATCCAA
GAGTGTCCTCGCAGGCC

atcg : Forward/Reverse primer

Genotyping assay

Primers:

hzu6_forward: 5' attaagctgcgctgccttacc~~caaggca~~ 3'

hzu6_reverse: 5' GGCCTGCGAGGACACTCTTGGAT 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: 372 bp

The sequencing results of the CZ262(-/-):

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WT      GCTCCTTGGGCACAAAGGTGCTATGTTATTACTGTACACCTTGGGCTTTTATGCCTOCCT
CZ262   GCTCCTTGGGCACAAAGGTGCTATGTTATTACTGTACACCTTGGGCTTTTATGCCTOCCT
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WT      CAGCCTGCTTGCCCTCAGGGCAACTTCCCAGGCTGAGAACATAGGGGCACATAAATC
CZ262   CAGCCTGCTT-----CCCAGGCTGAGAACATAGGGGCACATAAATC
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WT      TGTCAGCACCACACCAGGAGAGCCACGTGCGGGATTCCCGAAAAGGACTACTTTCTGTCA
CZ262   TGTCAGCACCACACCAGGAGAGCCACGTGCGGGATTCCCGAAAAGGACTACTTTCTGTCA
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Reference:

Han S, Liu X, Xie S, Gao M, Liu F, Yu S, Sun P, Wang C, Archacki S, Lu Z, Hu X, Qin Y, Qu Z, Huang Y, Lv Y, Tu J, Li J, Yimer TA, Jiang T, Tang Z, Luo D, Chen F, Liu M. Knockout of ush2a gene in zebrafish causes hearing impairment and late onset rod-cone dystrophy. Hum Genet. 2018 Oct;137(10):779-794.