

***gbf1*^{tsucd7/+} (CZRC catalog ID: CZ402)**

Nature of the mutation

Between 2930 bp to 2936 bp of the wild-type *gbf1* coding sequence, GGCTCAG is deleted in exon 22. The mutated *gbf1* codes for a truncated protein containing 993 aa, of which 1735 aa are identical to wildtype *gbf1*.

Sense Strand Sequence

tcttgattcatgaatatacttttagtggattataaaagagtgtaagtaattatgaagatttggttaaatggtttatcatctaacgcctcacactgattct
attggggagaaaagctctttttaaagtggttgcacaatgattgtctctgtcagGGGTGAGTCTGCTGTTTTGAGTTTT
GTCAGCTGGTTAACTGAGCGAACAATCAGGGCTCAGAGGTCCCTCCACTGAGAAC
CAGGAGGCCAAGCAAGCTGCACTGCTCTGCATAAAGgtacgttttctttctttctttctttctttctgtgctga
ctgttcacatgaataagttcaatatcaatatatctcatctttcag

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg: Forward/Reverse primer

Genotyping assay

Primers:

CZ402_forward: 5' ACTGAGCGAACAATCAGAGG 3'

CZ402_reverse: 5' GTTGGGTTTTACAGTGTACGCA 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 no product; Mutant 277 bp

The sequencing results of the CZ402:

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

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WT          GGGTGAGTCTGCTGTTTTGAGTTTTGTCAGCTGGTTAACACTGAGCGAACAAATCAGGGCTCAGAGGTCCTCCACT
CZ402       GGGTGAGTCTGCTGTTTTGAGTTTTGTCAGCTGGTTAACACTGAGCGAACAAATCAG-----AGGTCCTCCACT
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Reference:

Chen, J., Wu, X., Yao, L., Yan, L., Zhang, L., Qiu, J., Liu, X., Jia, S., and Meng, A. (2017). Impairment of cargo transportation caused by *gbf1* mutation disrupts vascular integrity and causes hemorrhage in zebrafish embryos. *J. Biol. Chem.* 292, 2315–2327.