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***tsu068Gt*/+(AB) (CZRC catalog ID: CZ44)**

Nature of the mutation

Nup107 locus is disrupted by an insertion of a gene trap construct contains the splice acceptor of the first intron of the zebrafish bcl2 gene and GFP, and as a result it fails to produce normal nup107 transcripts. Homozygous nup107^{tsu068Gt} mutant embryos exhibit tissue-specific defects after 3 dpf, including loss of the pharyngeal skeletons, degeneration of the intestine, absence of the swim bladder, and smaller eyes, die at 5–6 days. This line expresses GFP ubiquitously in the whole body (Zheng, Yang et al. 2012).

Genotyping assay

1. Genotyping of the *tsu068Gt* allele is based on the fluorescent microscope. As identified by fluorescent microscope, the GFP fluorescence signal is detectable at 48 hpf.

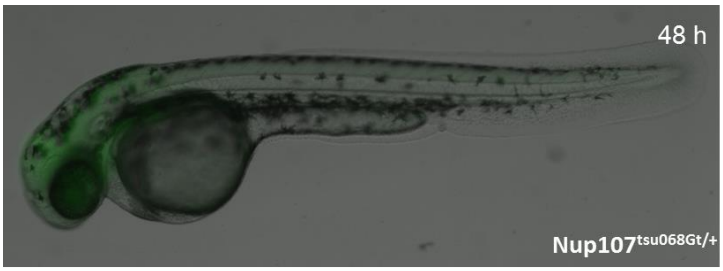

Figure. The *tsu068Gt* line predominantly expresses GFP in the pharyngeal region, eye, tectum and intestine at 48 hpf.
The figure shows the lateral view of *tsu068Gt* embryos at 48 hpf.

2. Genotyping of the *tsu068Gt* line can also be performed via allele-specific PCR using eGFP-specific primers (Sense primer: GTAAACGGCCACAAGTTCAG, antisense primer CTCGTTGGGGTCTTTGCT, the length of PCR fragment is 576 bp).

Reference

Zheng, X. F., S. Y. Yang, et al. (2012). "Loss of Zygotic NUP107 Protein Causes Missing of Pharyngeal Skeleton and Other Tissue Defects with Impaired Nuclear Pore Function in Zebrafish Embryos." Journal of Biological Chemistry **287**(45).