Address: Institute of Hydrobiology, CAS. No. 7, South Donghu Rd., Wuhan, 430072, China.
Tel: +86(0)2768780570 Email: zebrafish@ihb.ac.cn Website: http://www.zfish.cn

***Jh2Tg*/+ (AB) (CZRC catalog ID: CZ72)**

Nature of the mutation

Jh2Tg is generated by random integration of a mCherry-containing construct, expresses mCherry in insulin producing β cells of the endocrine pancreas. The earliest time point in embryogenesis we could detect fluorescence was around 20 hpf just prior to the β cells coalescing as the principal islet forms. Fluorescence was maintained through development and localized to the endocrine pancreas in larvae (Pisharath, Rhee et al. 2007).

Genotyping assay

1. Genotyping of the *jh2Tg* allele is based on the fluorescent microscope. As identified by fluorescent microscope, the mCherry fluorescence signal is detectable at 2 dpf.

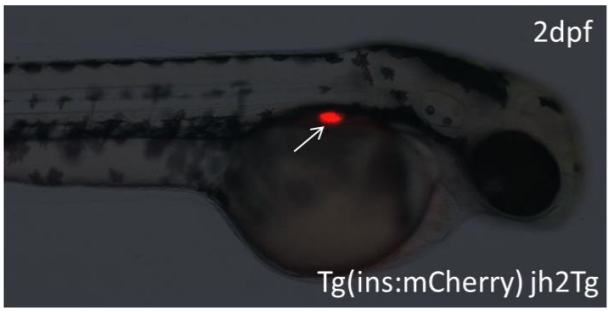

Figure. The *jh2Tg* line expresses mCherry in the pancreas at 2 dpf.
The figure shows the lateral view of *jh2Tg* embryos at 2 dpf.

2. Genotyping of the *jh2Tg* line can also be performed via allele-specific PCR using mCherry-specific primers (Sense primer: GAGGATAACATGGCCATCATC, antisense primer: TTACTTGTACAGCTCGTCCATG, the length of PCR fragment is 693 bp).

Reference

Pisharath, H., J. M. Rhee, et al. (2007). "Targeted ablation of beta cells in the embryonic zebrafish pancreas using E-coli nitroreductase." Mechanisms of Development **124**(3): 218-229.