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

Zf44Tg /+(AB) (CZRC catalog ID: CZ31)

Nature of the mutation

The *zf44Tg* allele was generated by random integration of a GFP-containing construct. This line expresses GFP in pituitary (Liu, Ren et al. 2008). Combined with time-lapse confocal microscopy lineage tracing of pomc (proopiomelanocortin)-expressing cells, this transgenic fish provides a model for studying the morphogenesis of anterior/intermediate lobe of anterior pituitary.

Genotyping assay

1. Genotyping of the *zf44Tg* allele is based on the fluorescent microscope. As identified by fluorescent microscope, the GFP fluorescence signal is detectable at 48 hpf.

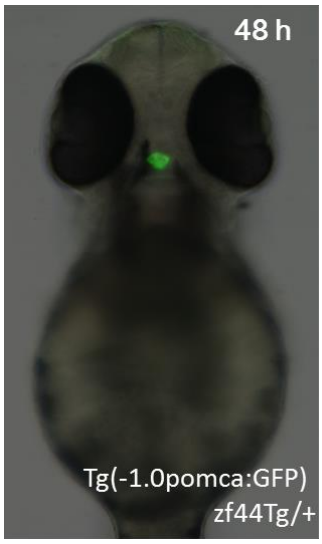

Figure. GFP expression in pituitary at 48 hpf in *zf44Tg* line.
The figure shows the ventral view of *zf44Tg* embryos at 48 hpf.

2. Genotyping of the *gz14Tg* line can also be performed via allele-specific PCR using GFP-specific primers (Sense primer: TCATATGAAACGGCATGACT, antisense primer TGGTCTGCTAGTTGAACGCT, the length of PCR fragment is 315 bp).

Reference

Liu, N. A., M. Ren, et al. (2008). "In vivo time-lapse imaging delineates the zebrafish pituitary proopiomelanocortin lineage boundary regulated by FGF3 signal." Developmental Biology **319**(2): 192-200.