

S854Tg/+ (AB) (CZRC catalog ID: CZ68)

Nature of the mutation

S854Tg is a gut-GFP line, generated by random integration of a GFP-containing construct, expresses GFP throughout the developing digestive system. GFP expression is initially ubiquitous, but becomes restricted to the endoderm by about 22 hpf. At 24hpf, GFP-positive endoderm emerged as a flat sheet in the pharyngeal region that constricts into a solid rod of midline cells, the intestinal rod, just rostral to the first Somite. Expression is also observed in the notochord until approximately 30 hpf, and in the eye and hatching gland. GFP expression is sometimes variable in heterozygous animals (the fluorescent gut is not well visible before 4 dpf), but uniform throughout the endoderm of embryos homozygous for the transgene (Field, Ober et al. 2003).

Genotyping assay

1. Genotyping of the *s854Tg* allele is based on the fluorescent microscope. As identified by fluorescent microscope, the GFP fluorescence signal is detectable at 50 hpf.

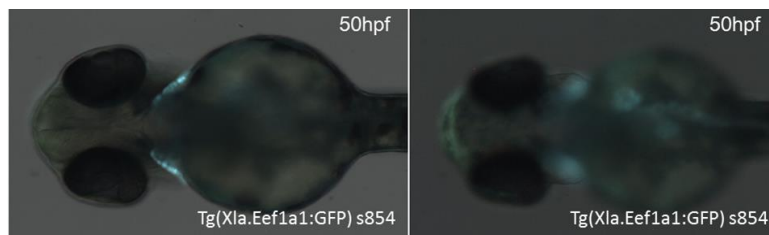


Figure. The *s854Tg* line expresses GFP in the digestive system at 50 hpf. The figure shows the ventral view of *s854Tg* embryos at 50 hpf.

Reference

Field, H. A., E. A. Ober, et al. (2003). "Formation of the digestive system in zebrafish. I. Liver morphogenesis." *Developmental Biology* **253**(2): 279-290.