

Hkz04tTg/+ (AB) (CZRC catalog ID: CZ61)

Nature of the mutation

Hkz04tTg is generated by random integration of a GFP-containing construct, predominantly expresses GFP in myeloid cells and T lymphocytes. GFP was first detected as early as 20 hpf in myeloid cells dispersed in the yolk sac. At 2 dpf, the GFP-positive cells were evident in the trunk, the tail region, the central nervous system, the thymus, and the kidneys (Li, Yan et al. 2012).

Genotyping assay

1. Genotyping of the hkz04tTg allele is based on the fluorescent microscope. As identified by fluorescent microscope, the GFP fluorescence signal is detectable at 30 hpf.



Figure. The hkz04tTg line expresses GFP in the macrophages and neutrophils at 30 hpf.

The figure shows the lateral view of *hkz04tTg* embryos at 30 hpf.

2. Genotyping of the hkz04tTg line can also be performed via allele-specific PCR using eGFP-specific primers (Sense primer: GTAAACGGCCACAAGTTCAG, antisense primer CTCGTTGGGGGTCTTTGCT, the length of PCR fragment is 576 bp).

Reference

Li, L., B. Yan, et al. (2012). "Live Imaging Reveals Differing Roles of Macrophages and Neutrophils during Zebrafish Tail Fin Regeneration." <u>Journal of Biological Chemistry</u> 287(30): 25353-25360.