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nz117Tg/+（AB）(CZRC Catalog ID: CZ 58)

Nature of the mutation

The *nz117Tg* allele is a transgenic zebrafish line *Tg(lyz:EGFP)* in which the zebrafish lysC promoter was used to drive macrophage expression of EGFP. And it is a macrophage reporter line, and facilitate direct observation of macrophage events. It has utility in dissecting the genetic determinants of commitment to the myeloid lineage and in further defining how lysozyme-expressing cells participate during inflammation

Genotyping assay

Genotyping of the *nz117Tg* allele is based on the fluorescent microscopy. The initial EGFP expression was first observed exclusively on the yolk surface at 22 hpf. This expression was restricted to a small collection of weakly expressing cells located over the anterior yolk. By 36 hpf, larger numbers of EGFP-expressing cells were seen over the yolk (with this domain expanded to also include more posterior yolk regions, a subset of which migrated with erythrocytes. Also at 36 hpf, EGFP-positive cells were seen accumulating within the caudal vasculature and surrounding mesenchyme. EGFP expression progressively intensified and by 48 hpf large numbers of strongly expressing cells were observed within the head mesenchyme and over the yolk). This developmental stage also marked a massive expansion of the posterior expression domain with large numbers of EGFP-expressing cells clustered together in close vicinity to the caudal vascular plexus.

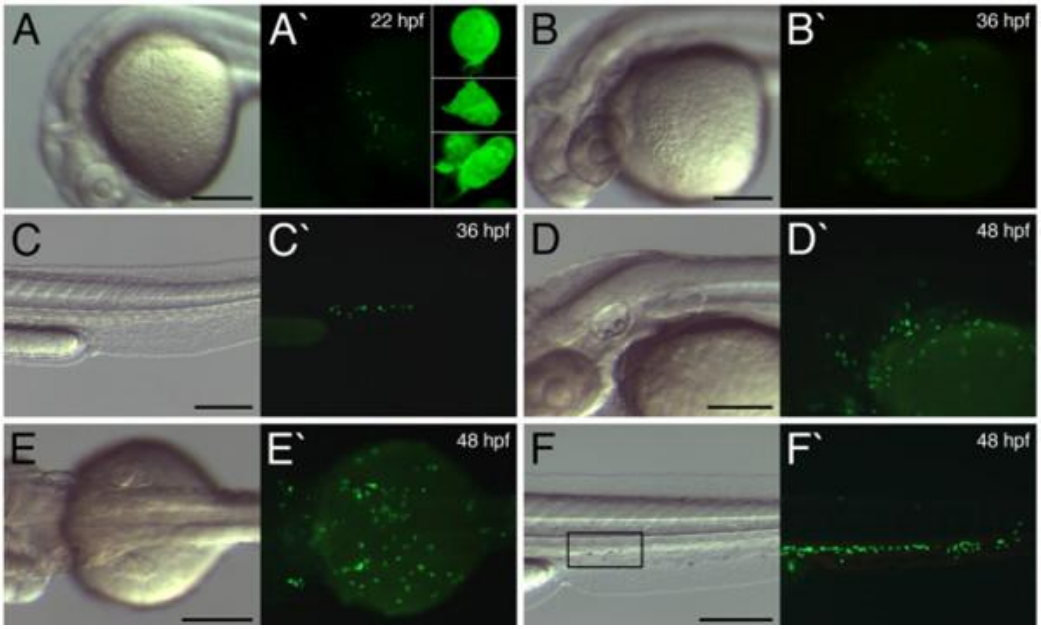

Figure. A transgenic zebrafish line *Tg(lyz:EGFP)*.EGFP expression within lysC:EGFP transgenic embryos and larvae. EGFP expression within 22 hpf (A), 36 hpf (B and C), 48 hpf (D-F)

Reference

Hall C, Flores MV, Storm T, Crosier K, Crosier P. The zebrafish lysozyme C promoter drives myeloid-specific expression in transgenic fish. BMC Dev Biol. 2007 May 4;7:42.