国家斑马鱼资源中心 CHINA ZEBRAFISH RESOURCE CENTER
地址：武汉市武昌区东湖南路 7 号 邮编：430072
电话：027-68780570 邮箱：zebrafish@ihb.ac.cn 网址：http://www.zfish.cn

nz50Tg/+（AB）(CZRC Catalog ID: CZ 59)

Nature of the mutation

The *nz50Tg* allele is a transgenic zebrafish line *Tg(lyz:DsRED2)* in which the zebrafish lysC promoter was used to drive macrophage expression of DsRED2. 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 *nz50Tg* allele is based on the fluorescent microscopy. The initial DsRED2 expression was first observed exclusively on the yolk surface at 26 hpf. Also at 48 hpf, DsRED2-positive cells were seen accumulating within the caudal vasculature and surrounding mesenchyme. DsRED2 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 DsRED2-expressing cells clustered together in close vicinity to the caudal vascular plexus.

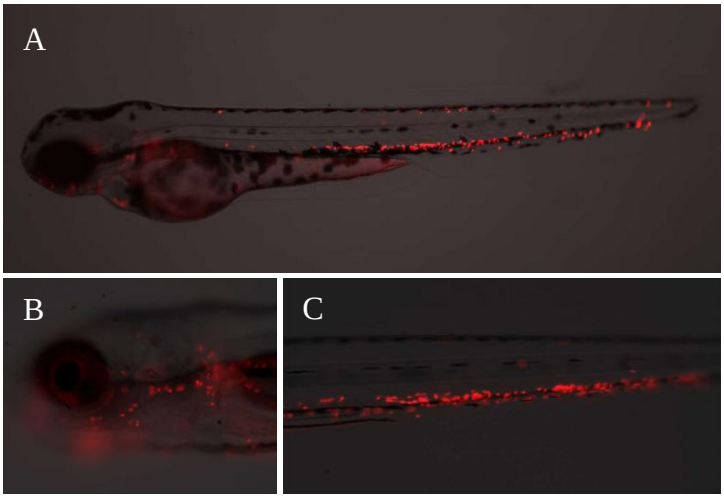

Figure. A transgenic zebrafish line *Tg(lyz: DsRED2)*. (A) DsRED2 expression within *lys:DsRED2* transgenic embryos at 48 hpf. (B) DsRED2 expression were observed within the head mesenchyme and over the yolk at 48 hpf .(C) DsRED2 expression were observed within the caudal vasculature and surrounding mesenchyme at 48 hpf.

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.