

## ***zf256Tg/+* (AB) (CZRC Catalog ID: CZ 103)**

### **Nature of the mutation**

The *zf256Tg* allele is a transgenic zebrafish line *Tg(-1.7apoa2:GFP)* with green fluorescent protein driven by the *Apo-14* promoter.

### **Genotyping assay**

Genotyping of the *zf256Tg* allele is based on the fluorescent microscopy. The earliest GFP fluorescence in *Tg(-1.7apoa2:GFP)* is initially observed around YSL beneath the embryo body at 10 hpf when the embryos develop to tail bud prominent, and the green fluorescence ring becomes obvious at 12 hpf when the embryos develop to 5-somite stage. In about 14-somite embryos at 16–17 hpf, atypical “salt-and-pepper” expression pattern is clearly observed in YSL around the yolk sac, and green fluorescence also appears in the notochord at 17 hpf. At about 20 hpf, a green fluorescence dot begins to appear between the notochord and the yolk sac adjacent to otic vesicle. The GFP-positive cells are observed in the triangle liver primordium on the left of 2 dpf embryos. At 3dpf, the GFP positive cells in liver primordium become small. The GFP fluorescence in *Tg(-1.7apoa2:GFP)* sustainably expressed from hepatoblasts and liver progenitor cells in liver primordium to hepatocyte.



Figure. Dynamic GFP expression pattern during embryogenesis in *Tg(-1.7apoa2:GFP)* line. The figure show the lateral view of *Tg(-1.7apoa2:GFP)* embryos at 3dpf. The arrow shows the expressed GFP in liver primordium to hepatocyte.

### **Reference**

Wang, R., Li, Z., Wang, Y., and Gui, J.F. (2011) An apo-14 promoter-driven transgenic zebrafish that marks liver organogenesis. PLoS One 6(7):e22555