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ihb180Tg/+（AB） (CZRC Catalog ID: CZ 327)

Nature of the mutation

The transgenic zebrafish line *Tg(HSP70:creb1a_ S133A -mcherry)* with generated by random integration of a fusion mCherry-containing construct with an hsp70-l (*hsp70l*) promoter to drive zebrafish *creb1a* transgene expression in whole body and eyes. mCherry was fused to the zebrafish *creb1a133S-A* which the protein in changed from S to A at the position 133, then the fusion proteins were cloned downstream of a 1.5 kb fragment of the zebrafish hsp70-l promoter.

Genotyping assay

There are two methods for *Tg(HSP70:creb1a_ S133A -mcherry)* Genotyping assay.

① Genotyping of the *Tg(HSP70:creb1a_ S133A -mcherry)* allele is based on the fluorescent microscopy. This line expresses jundn-mCherry ubiquitously by heat shock at 24 hpf. Heat shock is performed by transferring fish from 28 water to water preheated to 37 ℃ with subsequent incubation in an air incubator at 39 ℃ for 2 hour. The initial RFP expression in whole body and eyes at 60 hpf.

② *Tg(HSP70:creb1a_ S133A -mcherry)* allele genome was collected using a Tissue DNA Kit (Omega Bio-Tek) and was detected by the forward primer 5′ - ATGAACAGACGGGCATTTAC - 3′ and reverse primer 5′ - TGATTGCTGGGAACAAGTAT - 3′. The forward primer was located at the end of the hsp70l promoter, and the reverse primer was located at the end of C-terminus of zebrafish *creb1a*. A 984bp fragment was amplified using these two primers.

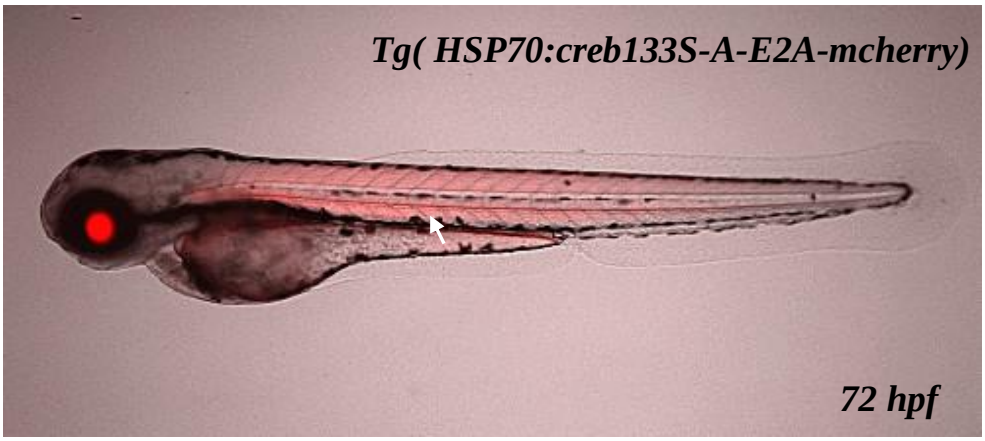

Figure. A transgenic zebrafish line *Tg(HSP70:creb1a_ S133A -mcherry).*
The figure show the lateral view of *Tg(HSP70:creb1a_ S133A -mcherry)* embryos expresses creb1a_ S133A -mCherry ubiquitously at 72 hpf after heat shock at 24hpf.

Reference