

## ***ihb304Tg/+* (AB) (CZRC Catalog ID: CZ 417)**

### **Nature of the mutation**

The *ihb304Tg/+* allele is a transgenic zebrafish line *Tg(gad1b:mCherry)*. A 2.3-kb sequence (nucleotides 117895 to 115528; GenBank: CR384078.18) upstream of the zebrafish *gad67* gene coding region was cloned, isolated, and integrated with the *mCherry* gene to generate transgenic constructs.

### **Genotyping assay**

Genotyping of the *ihb304Tg* allele is based on the fluorescent microscopy. The mCherry fluorescence in *Tg(gad1b:mCherry)* is observed in the brain, olfactory pit, optic tectum, medulla oblong, spinal cord and in the eye.

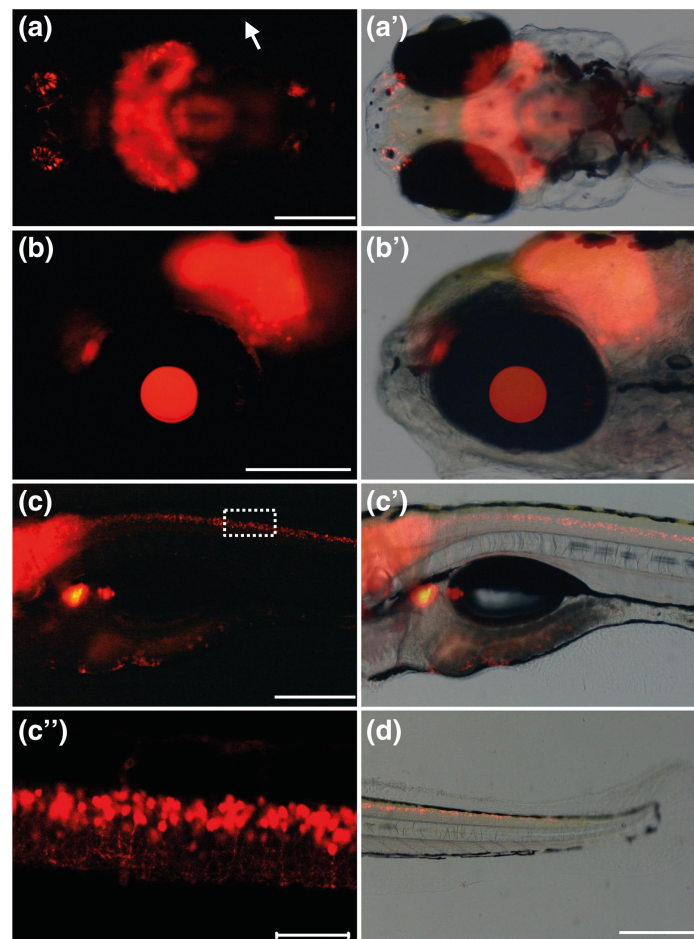


Figure 1. *Tg(gad67:mCherry)* transgenic zebrafish allow high-resolution labeling of GAD67-positive GABAergic neurons. (a–d) The 7 dpf *Tg(gad67:mCherry)* fish was viewed by fluorescence macro-microscope. (a and a') Dorsal view of mCherry expression pattern in the brain of *Tg(gad67:mCherry)* fish; the mCherry-positive neurons are mostly found in the olfactory pit, optic tectum, and medulla oblong. (b and b') Lateral view of mCherry-positive neurons in the eye. (c, c', and d) mCherry-positive neurons in the spinal cord. Box represents magnified view presented in part (c''). Scale bar, 50  $\mu$ m. (c'') Magnified view showing the position and projection

of mCherry-positive neurons in the spinal cord. Scale bar, 200  $\mu$ m.

## **Reference**

Song, Y., Tao, B., Chen, J., Jia, S., Zhu, Z., Trudeau, V.L., Hu, W. (2017) GABAergic Neurons and Their Modulatory Effects on GnRH3 in Zebrafish. *Endocrinology*. 158(4):874-886