

zju5Tg/+ (AB) (CZRC Catalog ID: CZ 219)

Nature of the mutation

The *zju5Tg* allele is a transgenic zebrafish line *Tg(d113p53:EGFP)* with green fluorescent protein driven by 4.1 kb upstream of the d113p53 translational start drives EGFP expression.

Genotyping assay

Genotyping of the *zju5Tg* allele is based on the fluorescent microscopy. The GFP fluorescence in *Tg(d113p53:EGFP)* is observed in the embryo body at 24 hpf. The GFP expression in the transgenic fish recapitulates the endogenous d113p53 expression, which normally keeps at a very low level but is strongly upregulated by DNA damage signals.

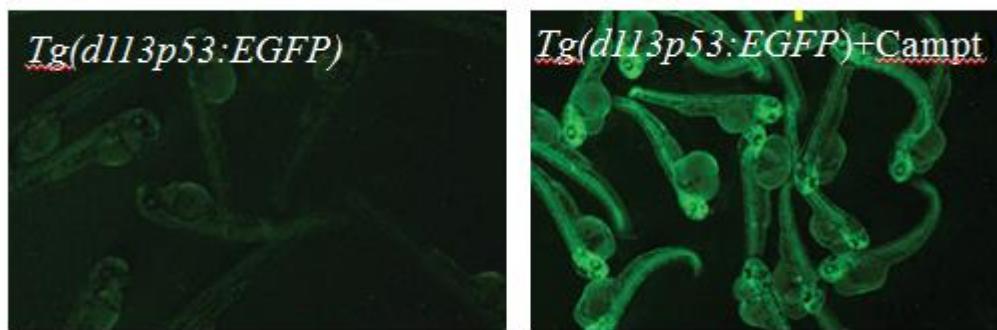


Figure1. Induction of GFP and d113p53 expression in *Tg(d113p53:gfp)* transgenic embryos upon the treatments with DNA-damaging drug 500nM camptothecin (Campt).

Reference

1. Chen J, Peng J. p53 Isoform Delta113p53 in zebrafish. *Zebrafish*. 2009 Dec;6(4):389-95.
2. Gong L, Gong H, Pan X, Chang C, Ou Z, Ye S, Yin L, Yang L, Tao T, Zhang Z, Liu C, Lane DP, Peng J, Chen J. p53 isoform Δ113p53/Δ133p53 promotes DNA double-strand break repair to protect cell from death and senescence in response to DNA damage. *Cell Res*. 2015 Mar;25(3):351-69.