

## **Zebrafish Core facility – Available Transgenic Fish Lines (2019)**

### **Tg(actb2:Hsa.H2B-Tomato)**

available on AB and Casper backgrounds

Fish will express Human Histone H2B fused to the fluorescent reporter Tomato.

### **Tg( $\beta$ -actin:GFP-C876S)**

available on AB background only

Fish contain a mutated form of the human HACE1 tumor repressor and ubiquitously expresses green fluorescent protein.

### **Tg( $\beta$ -actin:KIT-D816V:2A-EGFP)**

available on AB background only

Fish contain mutated human KIT which is found in a pre-leukemic condition, systemic mastocytosis (SM), which results in abnormal mast cell development and an accumulation of mast cells in the blood and tissues of the body.

### **Tg(cd41:EGFP)**

available on AB and Casper backgrounds

Fish will express green fluorescence in thrombocytes and hematopoietic stem cells.

### **Tg(c-myb:EGFP)**

available on AB and Casper backgrounds

Fish will express green fluorescence in hematopoietic stem cells.

### **Tg(fli1a:dsRED)**

available on AB and Casper backgrounds

Fish will express red fluorescence in developing vasculature throughout embryogenesis.

### **Tg(fli1a:EGFP)**

available on Casper background only

Fish will express green fluorescence in developing vasculature throughout embryogenesis.

### **Tg(gata1:EGFP)**

available on AB and Casper backgrounds

Fish will express green fluorescence in erythrocytes.

**Tg(gata2:EGFP)**

available on AB and Casper backgrounds

Gata2 gene has been tagged with the EGFP fluorescent marker to specify for blood cells and neuronal tissue cells in the CNS, head and enveloping layer.

**Tg(hsp70:Gal4)**

available on AB background only

Fish express the GAL4 protein when 70 kilodalton heat shock proteins (hsp70) are expressed after a short period of heat stress (40 C). GAL4 will activate all genes within the cell regulated by the UAS promotor region.

**Tg(lmo2:dsRED)**

available on AB background only

Fish will express red fluorescence in erythro-myeloid precursor cells.

**Tg(mpeg1:EGFP)**

available on Casper background only

Fish will express green fluorescence in macrophage lineage cells.

**Tg(mpx:EGFP)**

available on Casper background only

Fish express EGFP under the neutrophil-specific myeloperoxidase promoter.

**Tg(myf7:EGFP)**

available on AB and Casper backgrounds

Fish will express green fluorescence in cardiac tissue.

**Tg(myf7:mCherry)**

available on AB and Casper backgrounds

Fish will express red fluorescence in cardiac tissue.

**Tg(runx144:EGFP)**

available on Casper background only

Fish will express green fluorescence in hematopoietic stem cells.

**Tg(UAS:Kaede)**

available on AB background only

The fish express Kaede, a photoactivatable fluorescence, under the UAS promoter which can only be expressed in the presence of GAL4 protein within the cell.

**Tg(ubi:EGFP)**

available on AB and Casper backgrounds

Fish ubiquitously express green fluorescent protein.

**Tg(unc503:EGFP)**

available on Casper background only

Fish express green fluorescence in striated muscle and cardiac tissue under regulation by the unc503 promoter region.