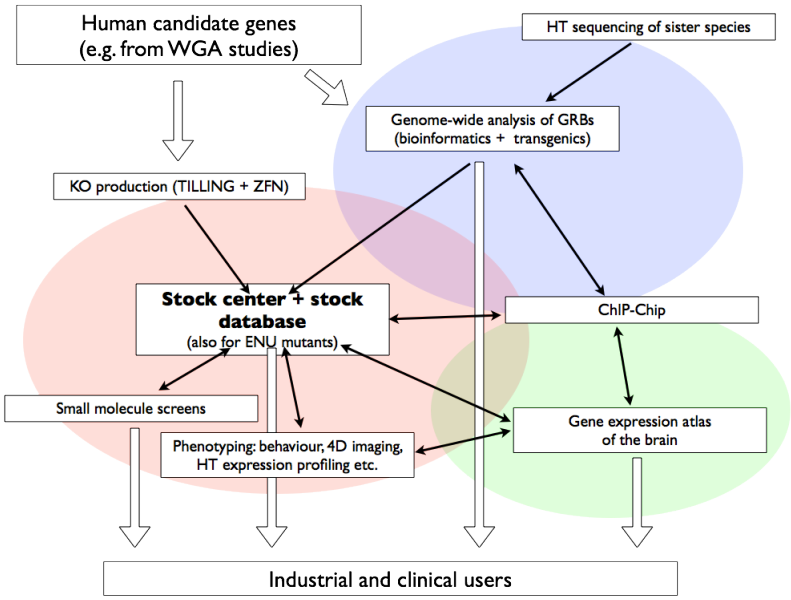


Figure 1. Flowchart showing the interaction of the work packages in ZF-HEALTH. Red, work packages 1 (Mutagenesis), 2 (Phenotying) and 5 (Chemical screens). Bluem, Work package 3 (enhancer analysis). Green, Work package 4 (gene expression in the brain).

Figure 2. EZRC Quarantine room. Fish lines are imported as surface-disinfected embryos only, and frozen or transferred to the Core fish room after one generation in the Quarantine room.

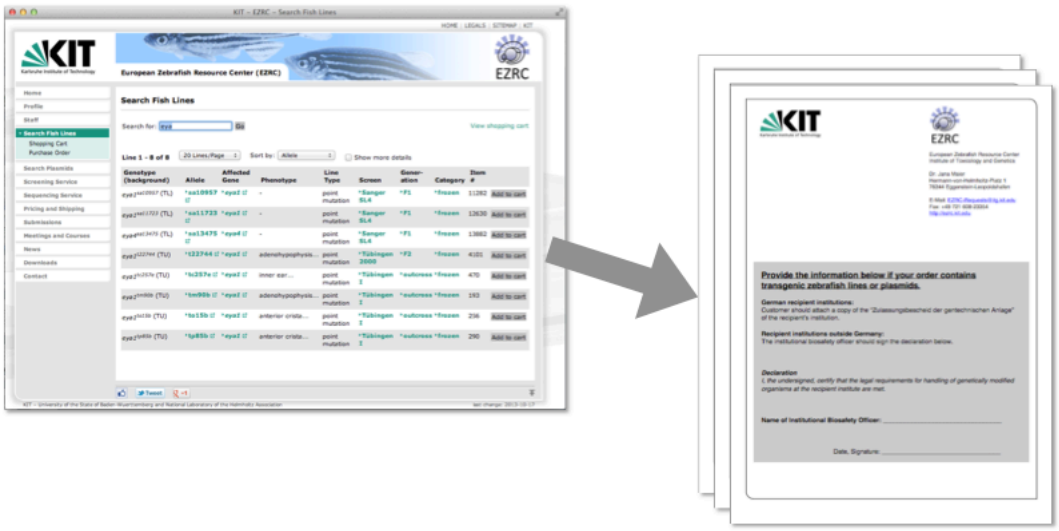


Figure 3. Public website for EZRC, with online ordering system.

Mutation Details

Allele Name: hu3072

Current Status: **Confirmed mutation in F2 line**
For more information about the meaning of this status and other statuses, please see our FAQs.

Availability: Unknown

Mutation: C > T

Consequence: Nonsense

Transcript ID	Consequence	Amino Acid Affected	Amino Acid Total	Exon Affected	Exon Total
ENSDART00000004504	Nonsense	398	866	3	3
ENSDART00000126885	Nonsense	398	866	2	2

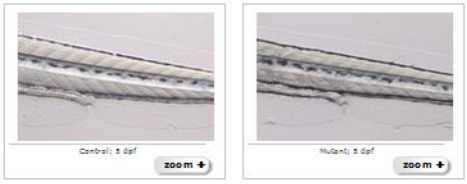
Genomic Location: Chromosome 22 (position 36071146)

KASP Assay ID: None (used for ordering genotyping assays from LGC Genomics)

KASP Sequence: None

Flanking Sequence: ACAGGGATTCCGCGCCCTCCACTCCAACCTTAGGCCCCCCTCTGCCAACA[C/T]GAGTAATGGTCACCACCAGCACTATCGCCATCCAGCCAACAATGACCAGG

Associated Phenotype: This allele has been associated with this phenotype by genetic linkage analysis and may not be causal. See FAQs for more info.



Stage	Entity	Quality	Tag
Larval: Day 5 ZFS:0000037	larval locomotory behavior GO:0008345	disrupted PATO:0001507	abnormal PATO:0000460
Larval: Day 5 ZFS:0000037	skeletal muscle ZFA:0005277	degenerate PATO:0000639	abnormal PATO:0000460
Larval: Day 5 ZFS:0000037	swim bladder ZFA:0000076	aplastic PATO:0001483	abnormal PATO:0000460

Figure 4. Zebrafish Mutation Project (ZMP) browser showing the dag1^{hu3072} mutant phenotype.

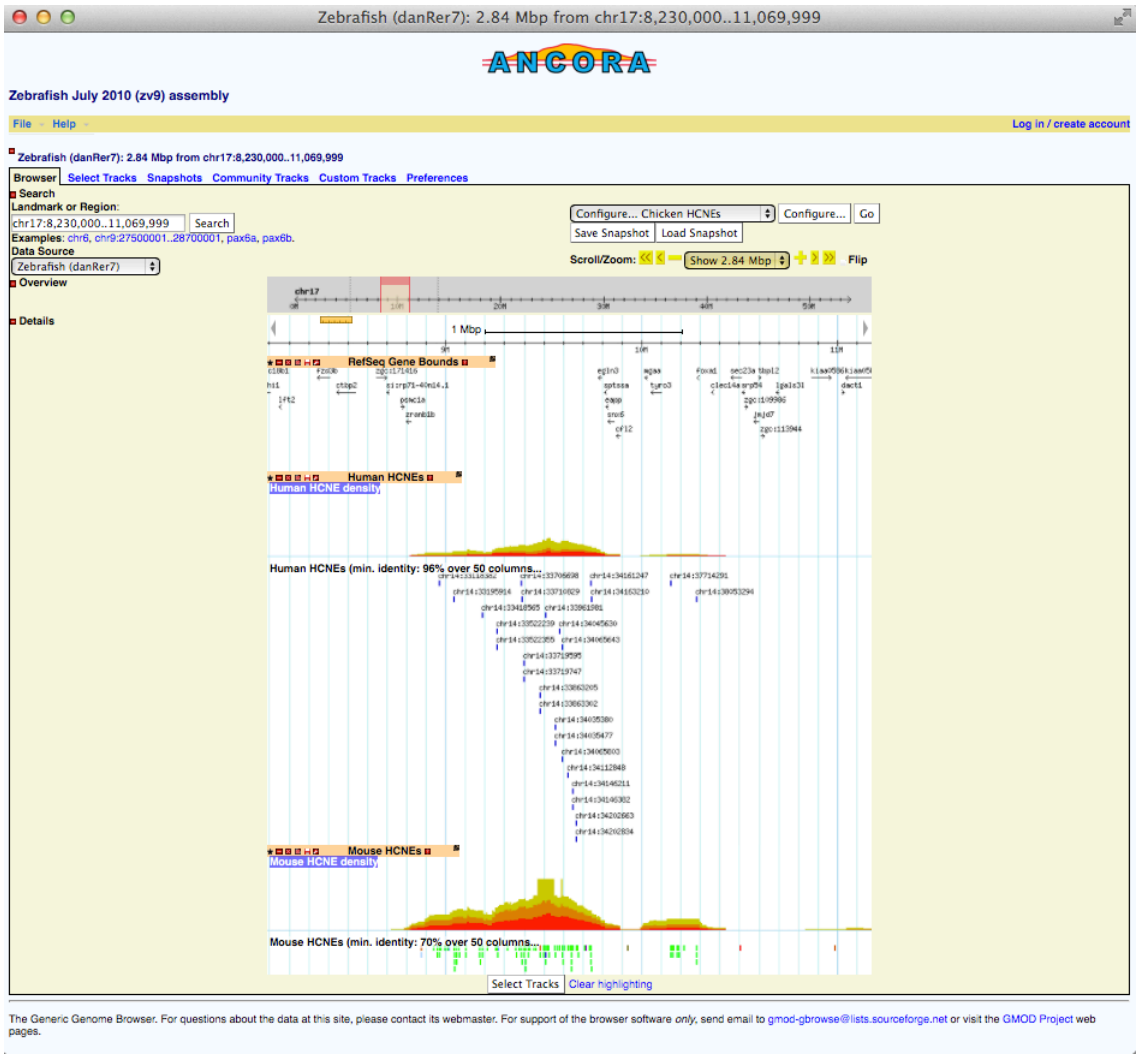


Figure 5. Screenshot of the Ancora browser. The Ancora browser shows conservation between zebrafish, human and mouse genome.

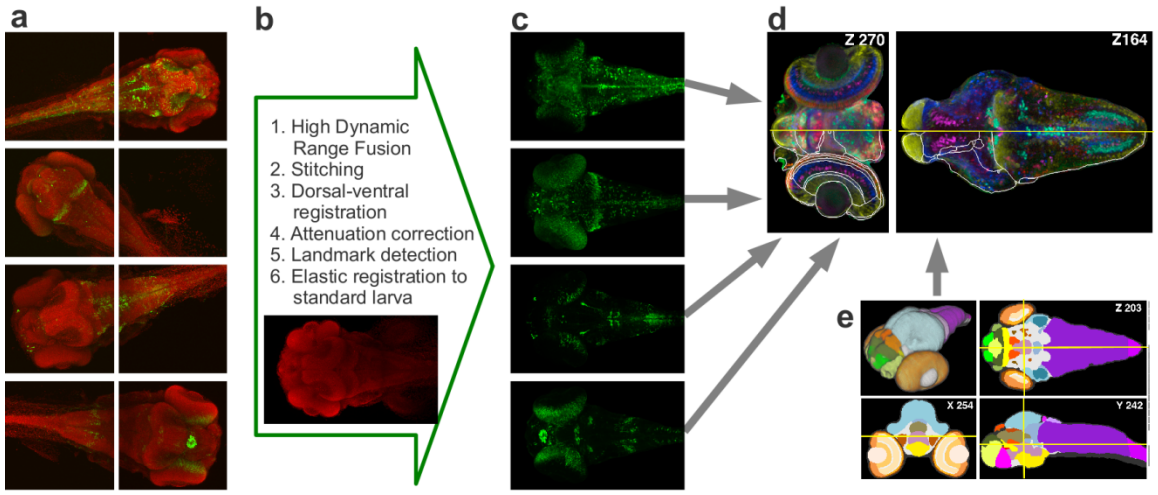


Figure 6. Steps of the ViBE-Z software framework for registration of 3D data volumes to anatomical reference model. For details see Ronneberger et al., 2012.

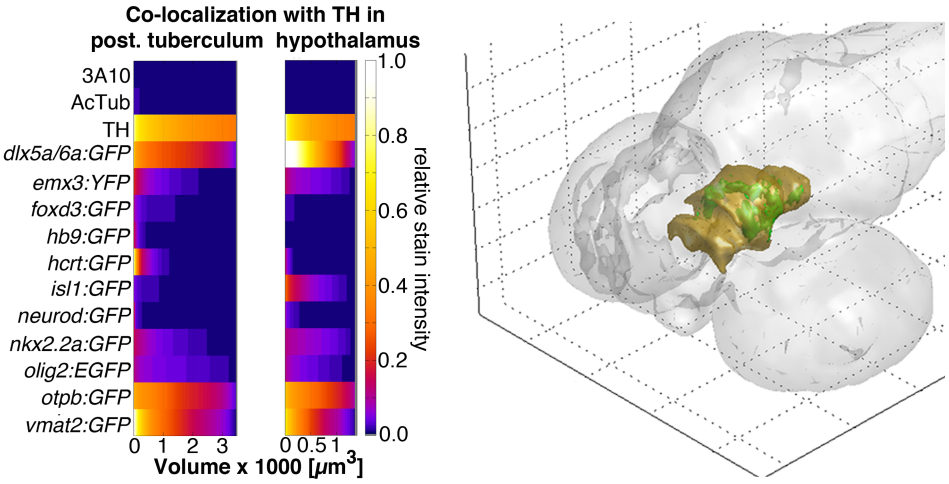


Figure 7. Comparison and visualization of expression volume and relative expression signal intensities in a defined anatomical subvolume. Left: Diagram of subvolumes defined by tyrosine hydroxylase expression within the posterior tuberculum (left column) or hypothalamus (right column). The volume of expression is specified on the x-axis, and the relative signal intensities (expression levels) by a color code from high intensities (white) to background levels (dark blue; bar at right). Right: Visualization of the TH expressing subvolume (green) within the posterior tuberculum (brown) and brain (grey).

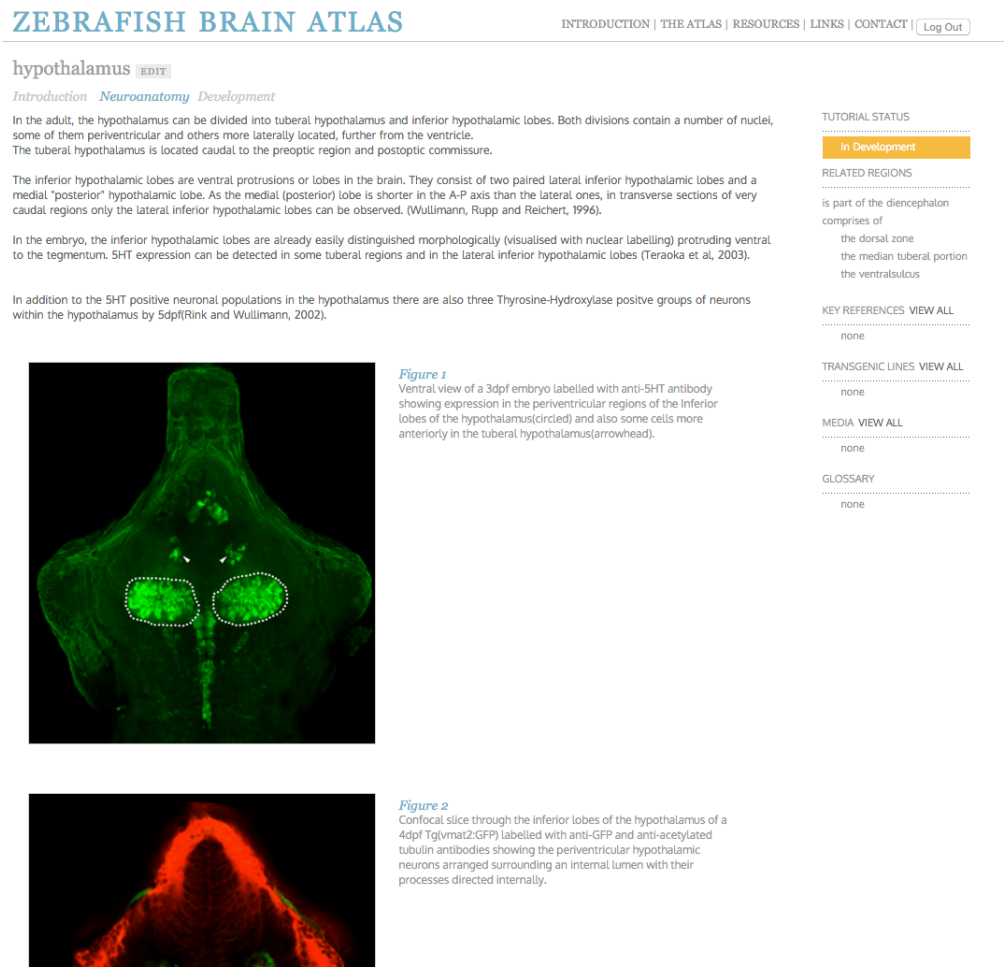


Figure 8. A screen shot of the hypothalamus tutorial from zebrafishbrain.org.