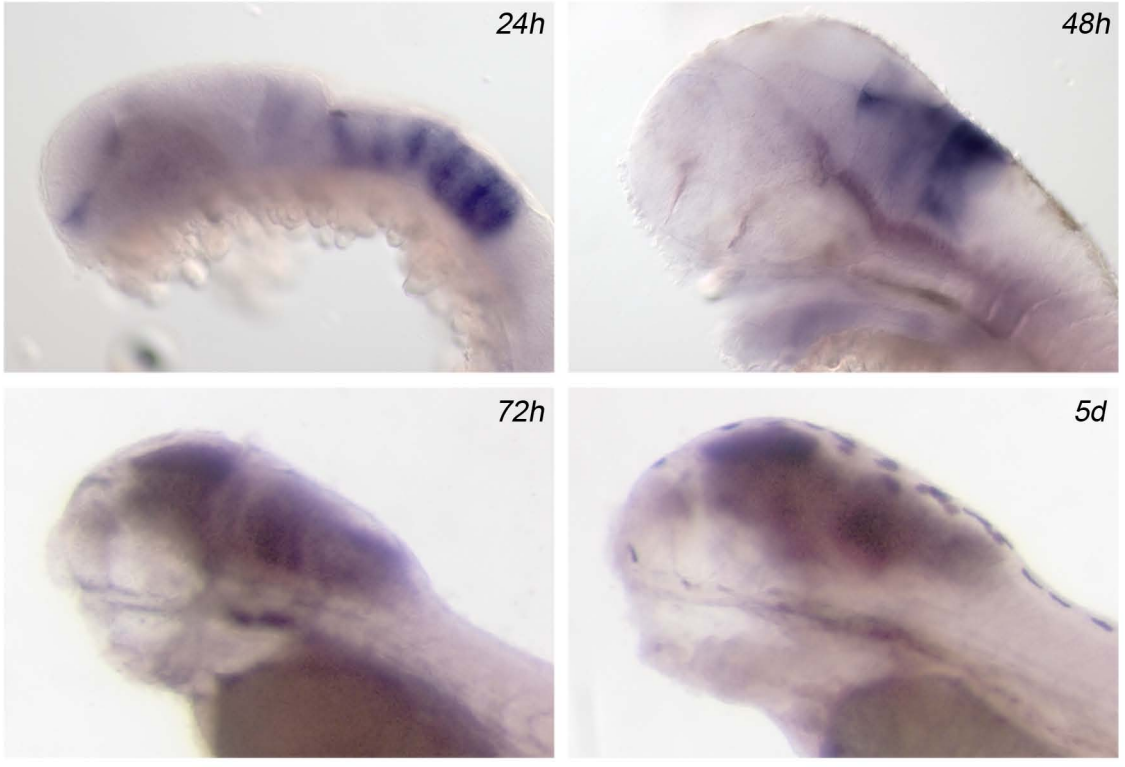
Suppl. Fig. 1: creatine kinase CKM3

Toro et al.,

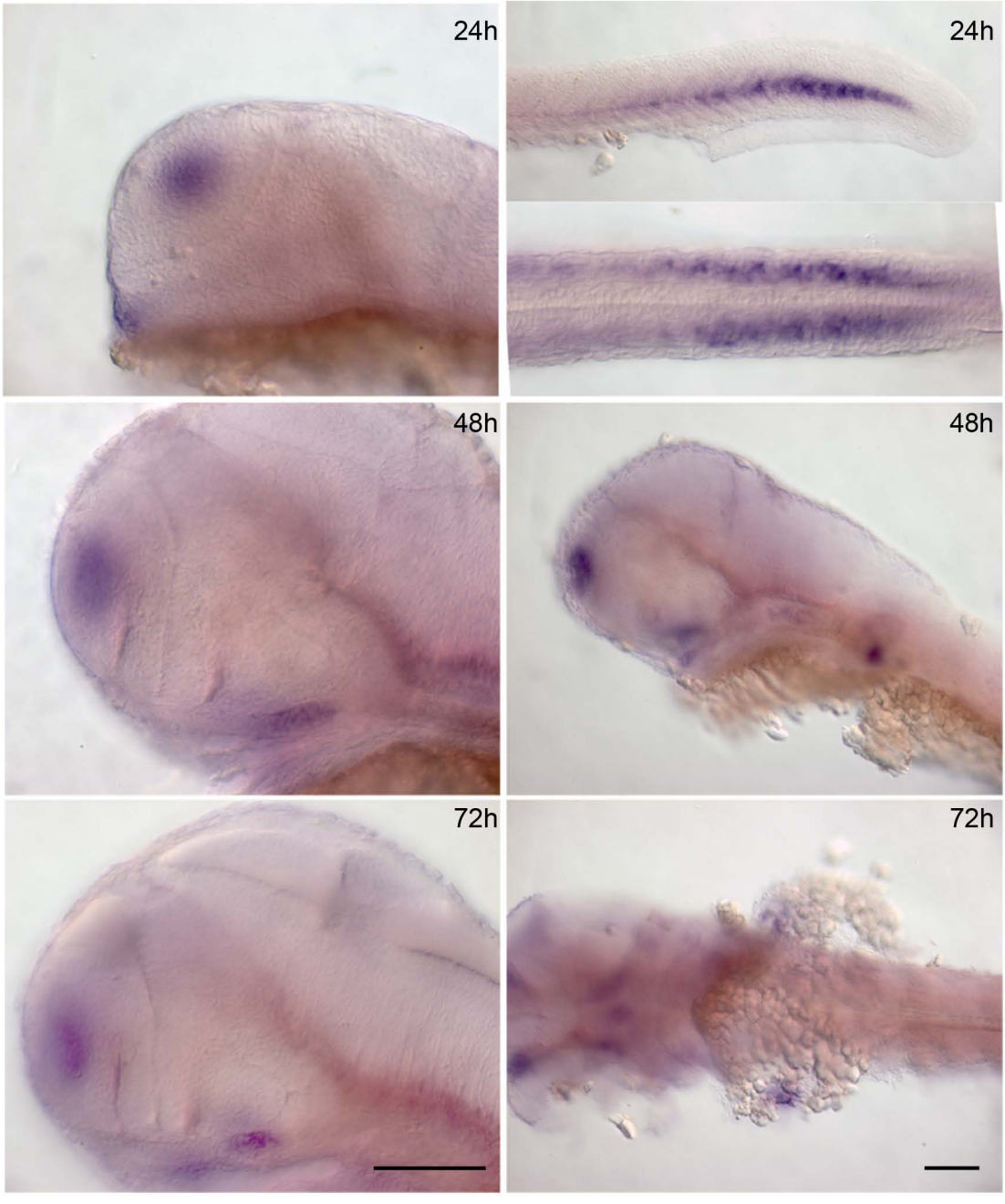
Suppl. Fig. 2: cytochrome P450, family 26, subfamily b, polypeptide 1

Toro et al.,



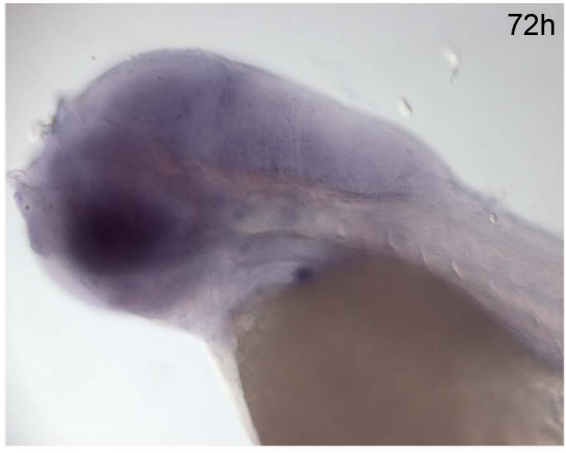
Toro et al.,

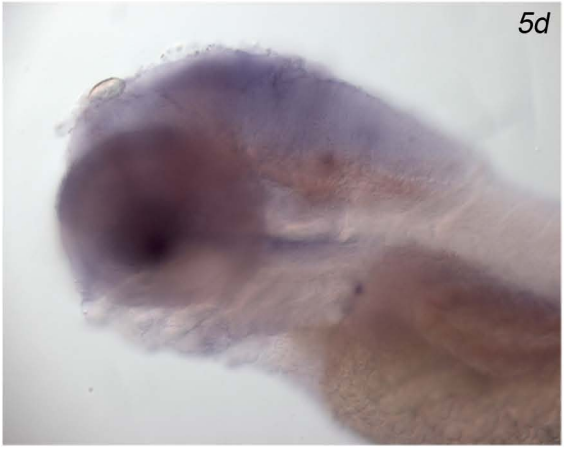
Suppl. Fig. 3: hydroxy-delta-5-steroid dehydrogenase, 3 beta- and steroid delta-isomerase

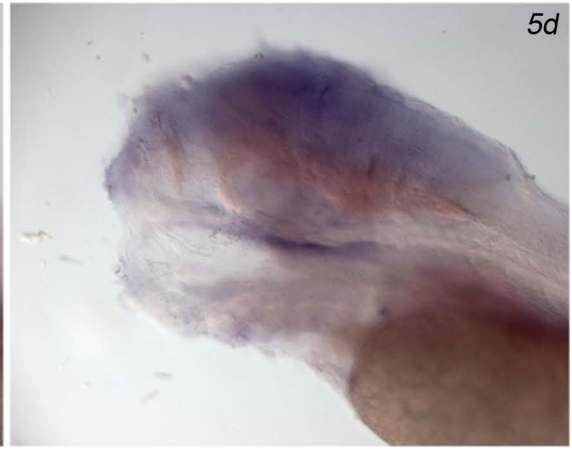


Toro et al.,

Suppl. Fig, 4: novel apoptosis-stimulating protein of p53

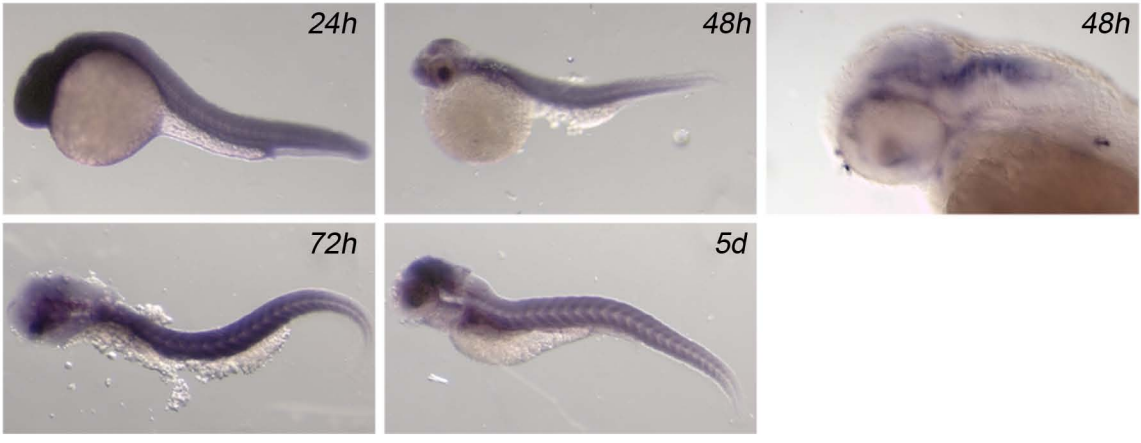






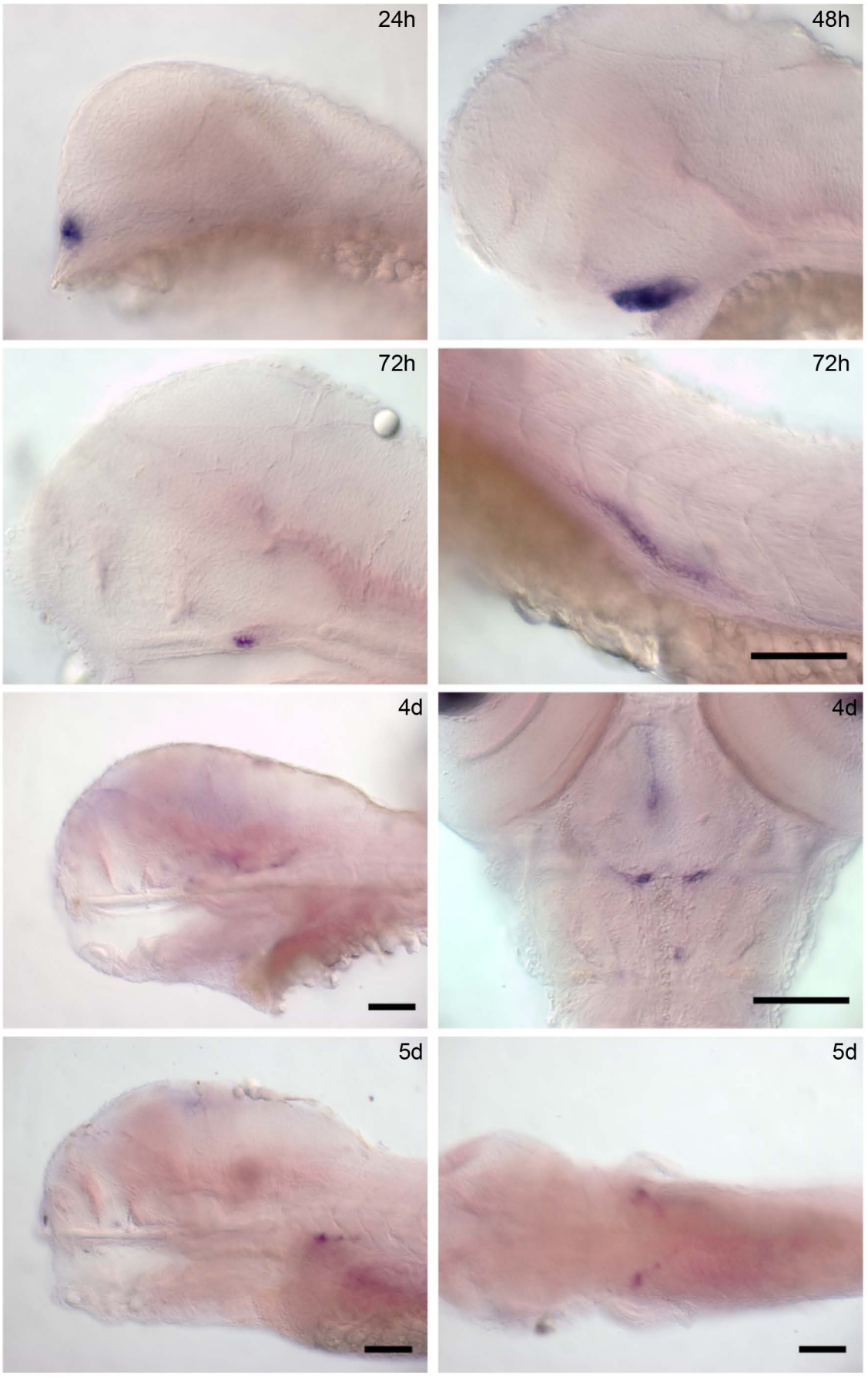
Suppl. Fig. 5: protocadherin 18

Toro et al.,



Toro et al.,

Suppl. Fig. 6: solute carrier family 16 (monocarboxylic acid transporters), member 9a

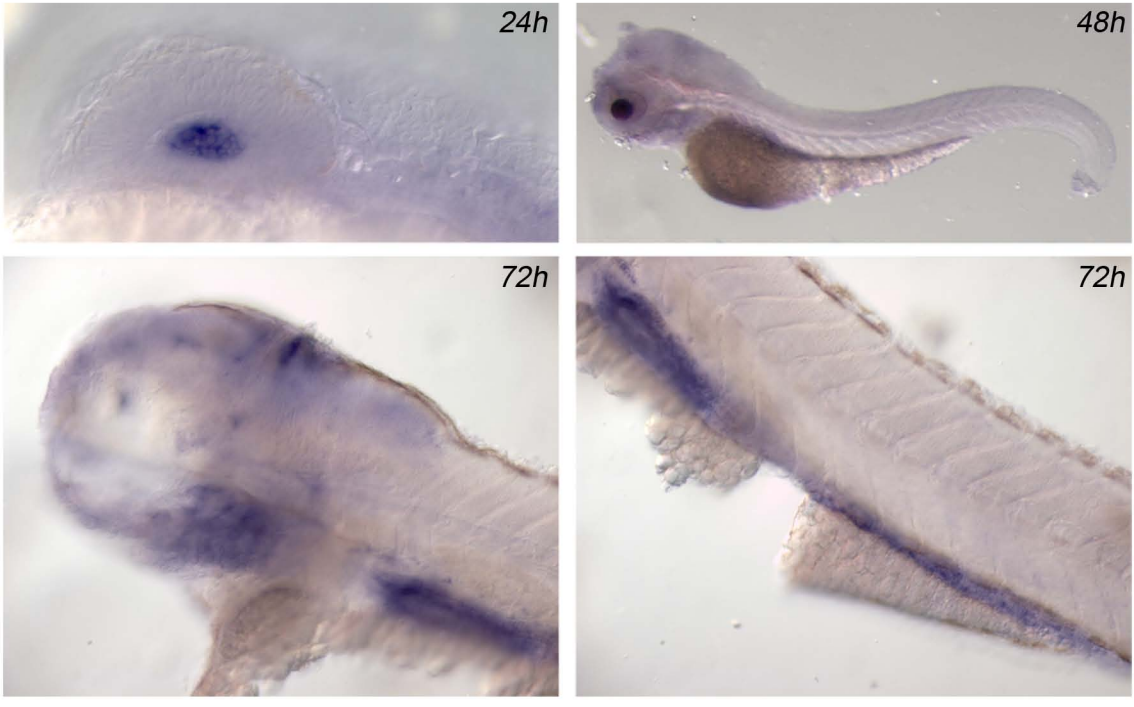


Suppl. Fig. 7: zgc:109940

Toro et al.,

Suppl. Fig. 8: *diacylglycerol kinase, alpha*

Toro et al.,

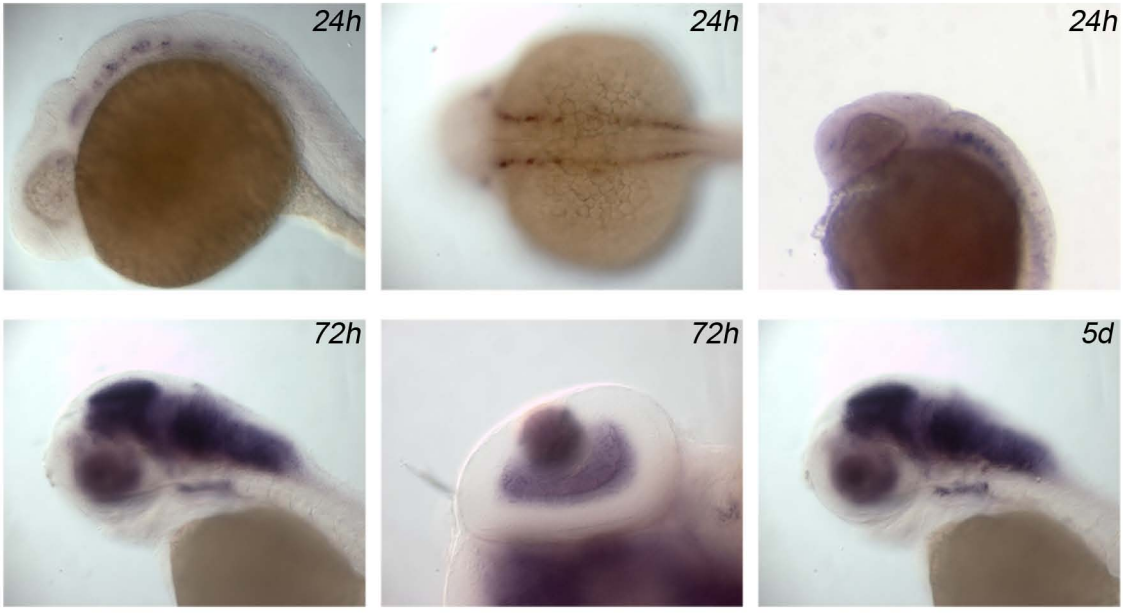


Suppl. Fig. 9: *proline-rich nuclear receptor coactivator 2*

Toro et al.,

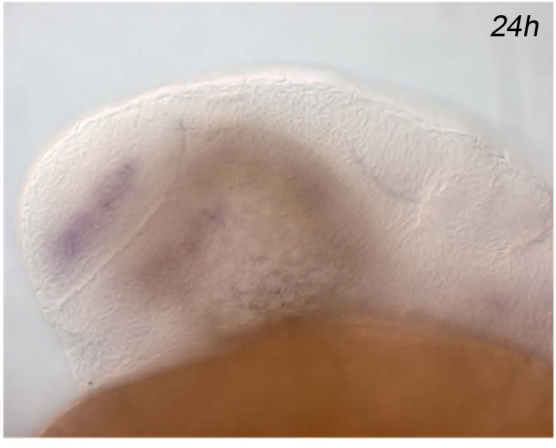
Suppl. Fig. 10: ataxin 2-binding protein 1

Toro et al.,



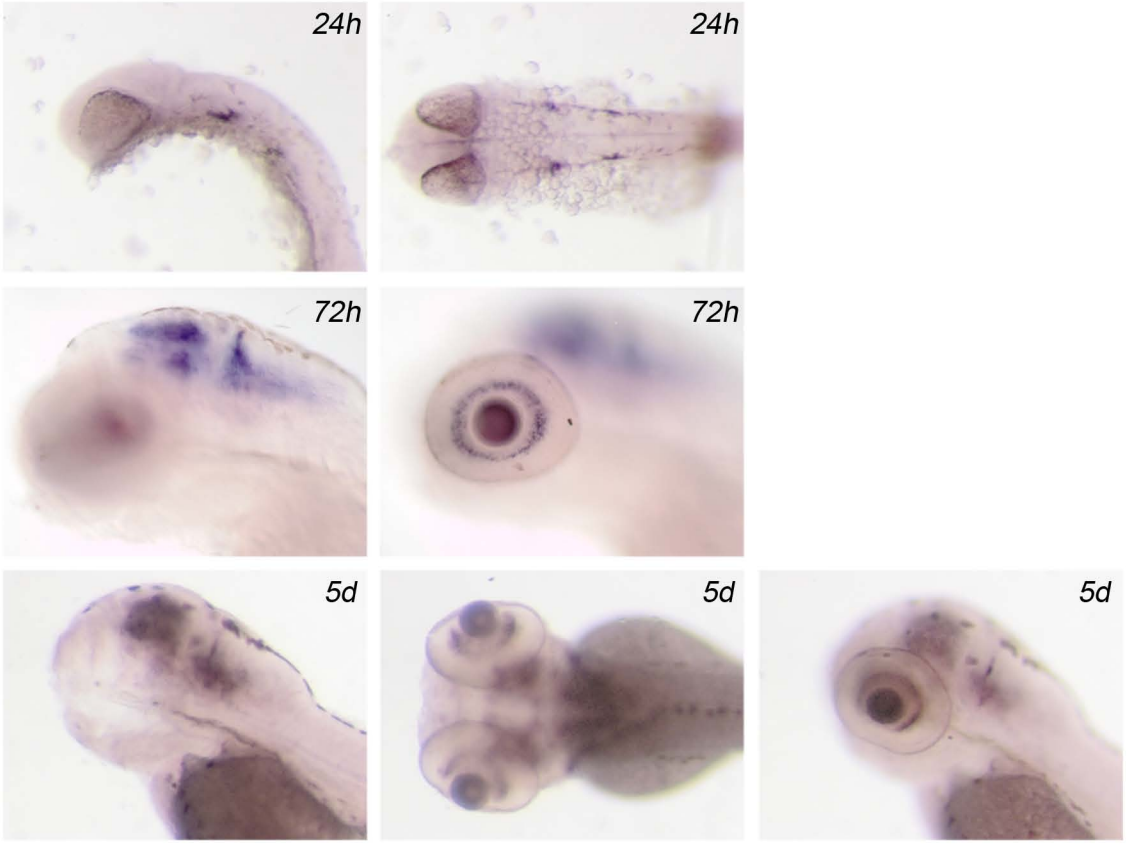
Suppl. Fig. 11: neurexin 3a alpha

Toro et al.,



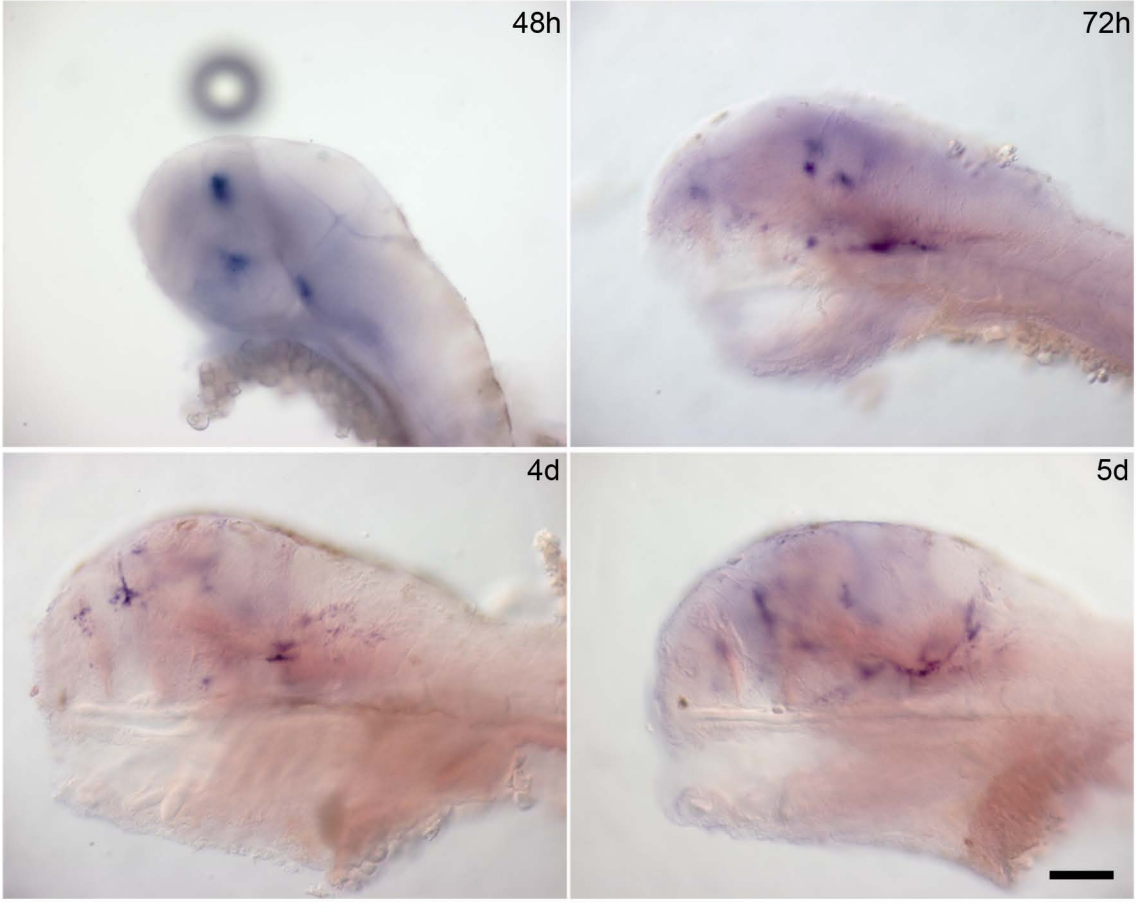
Suppl. Fig. 12: parvalbumin 6

Toro et al.,



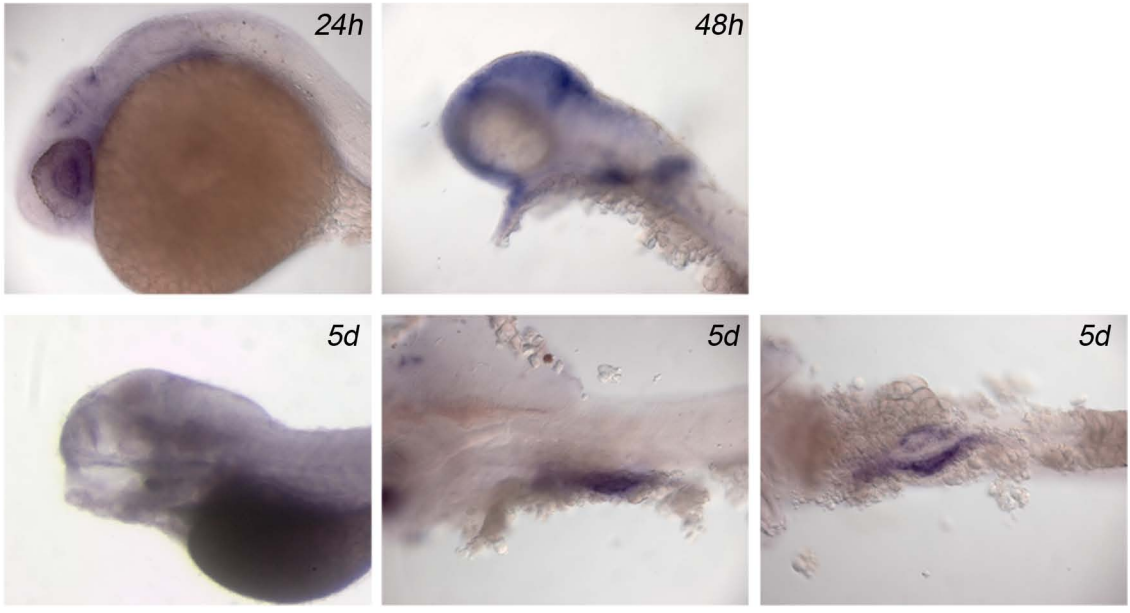
Suppl. Fig. 13: proenkephalin-like

Toro et al.,



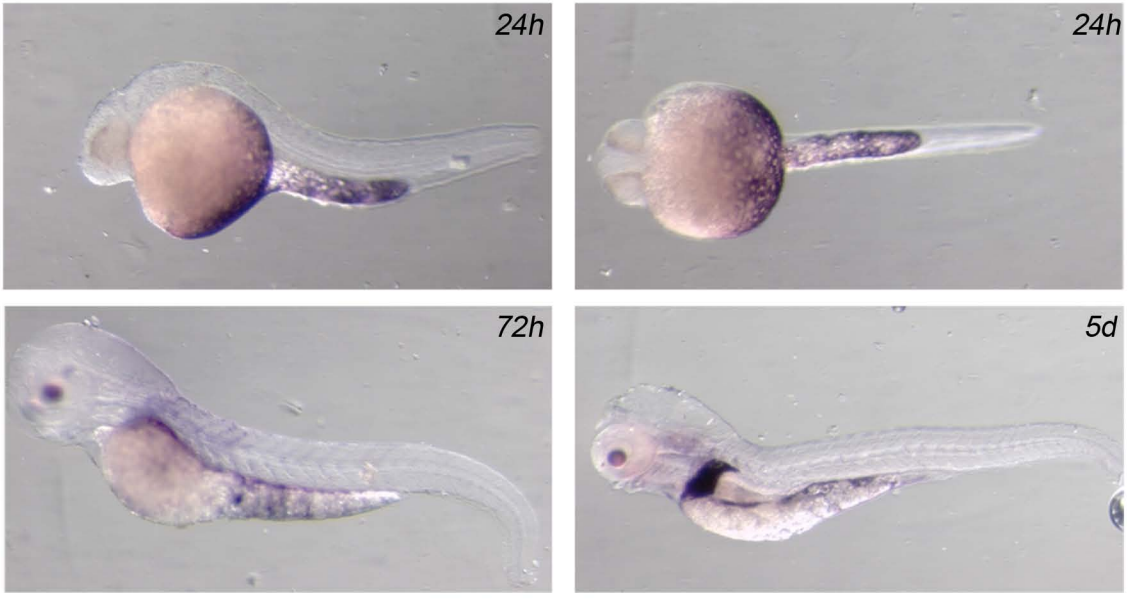
Suppl. Fig. 14: RAN binding protein 1

Toro et al.,



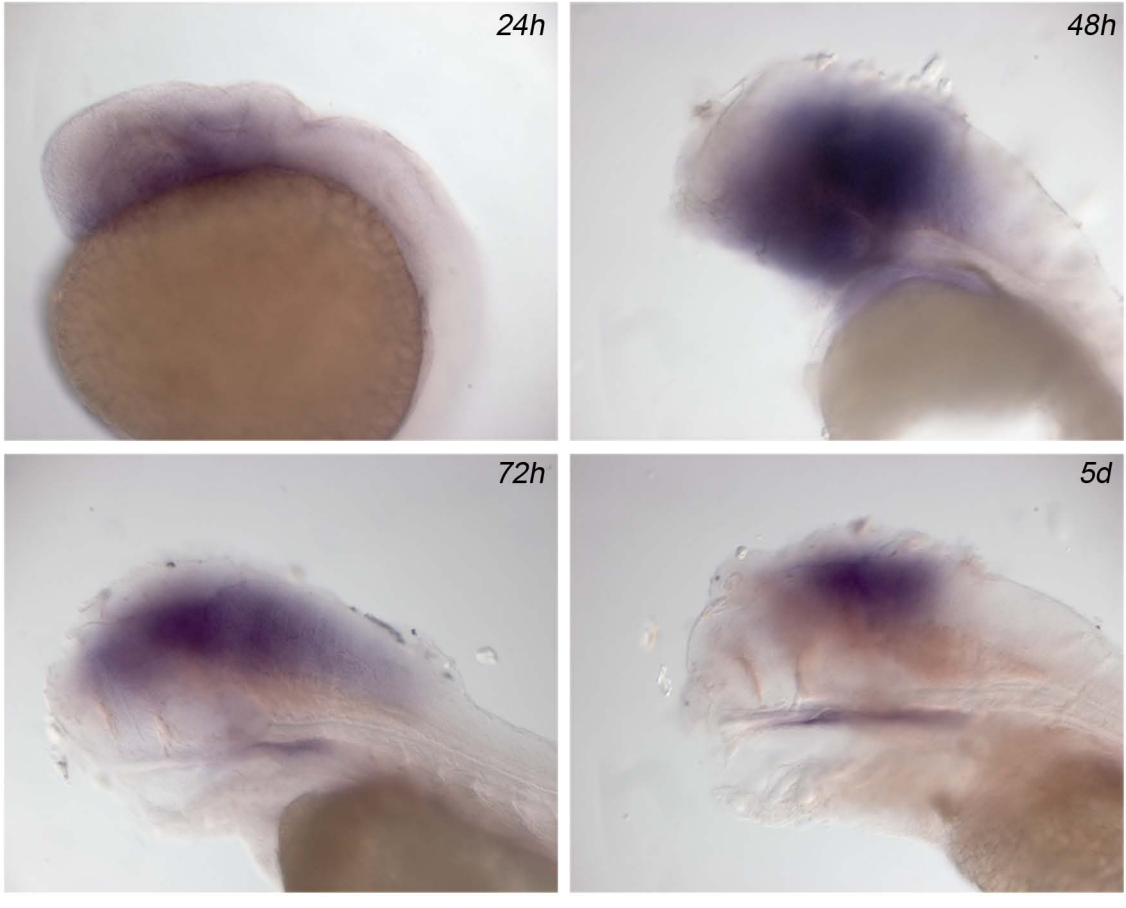
Suppl. Fig 15: retinol binding protein

Toro et al.,



Suppl. Fig. 16: similar to RIKEN cDNA 1010001J12 gene

Toro et al.,

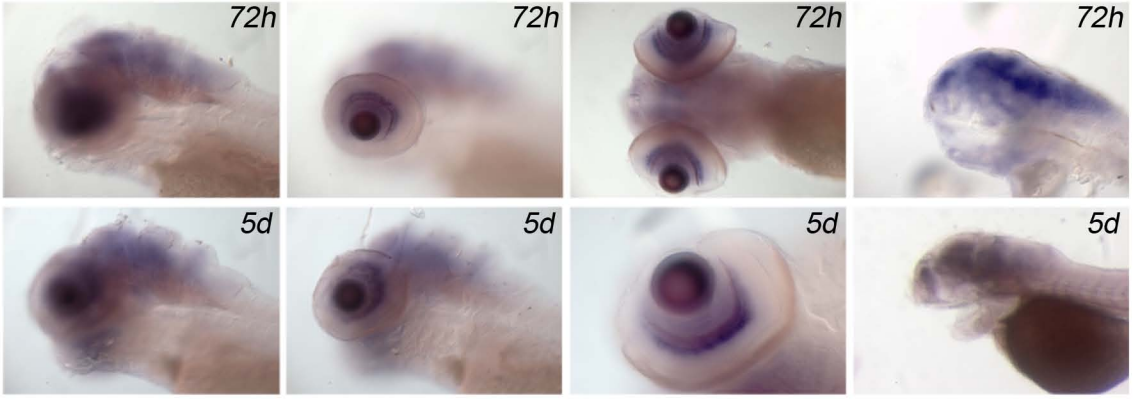


Suppl. Fig. 17: forkhead box k2

Toro et al.,

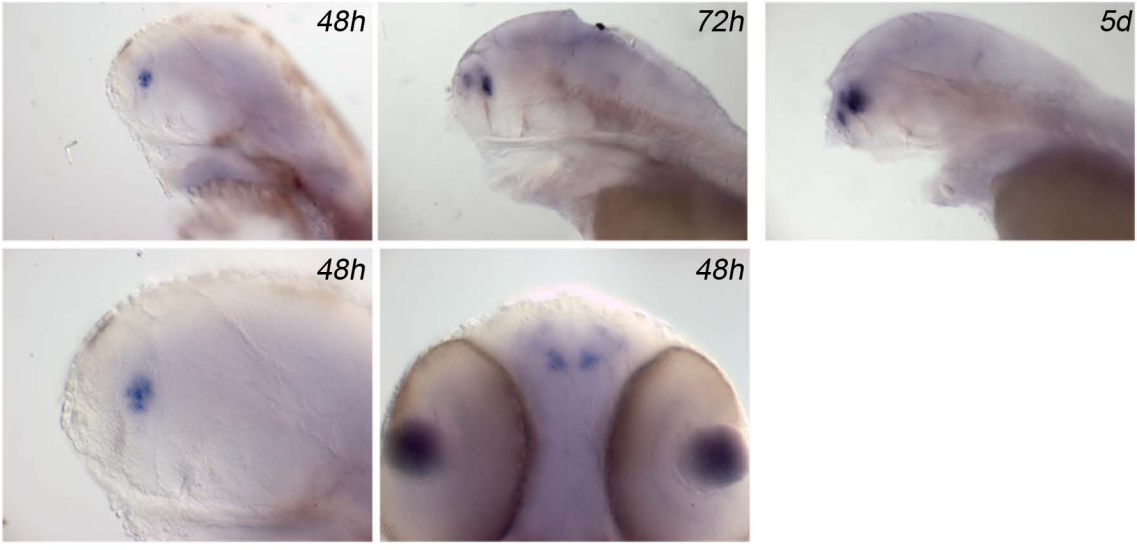
Suppl. Fig. 18: glutamate receptor, ionotropic, N-methyl D-aspartate 1b

Toro et al.,



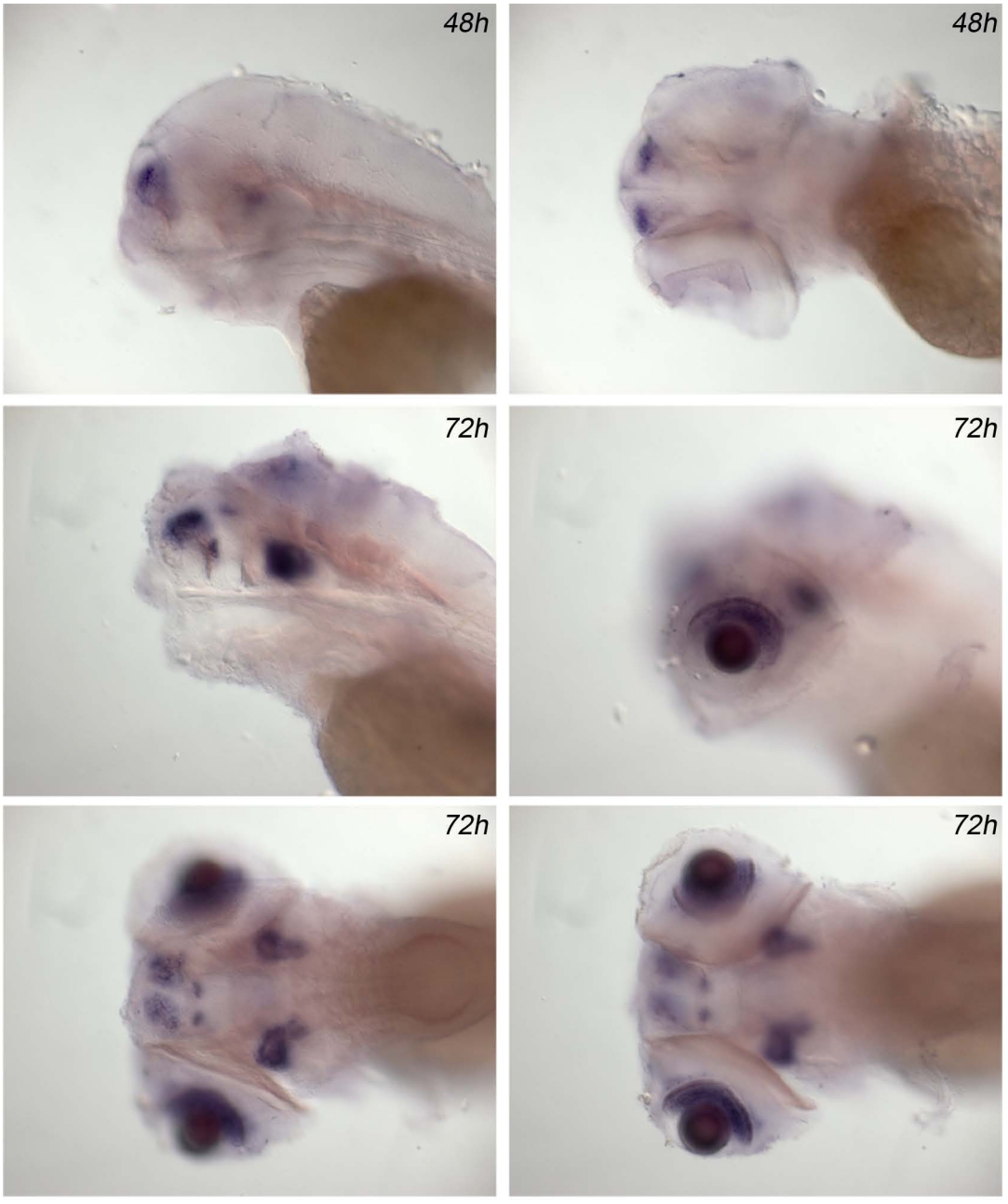
Suppl. Fig. 19: natriuretic peptide precursor C - like

Toro et al.,



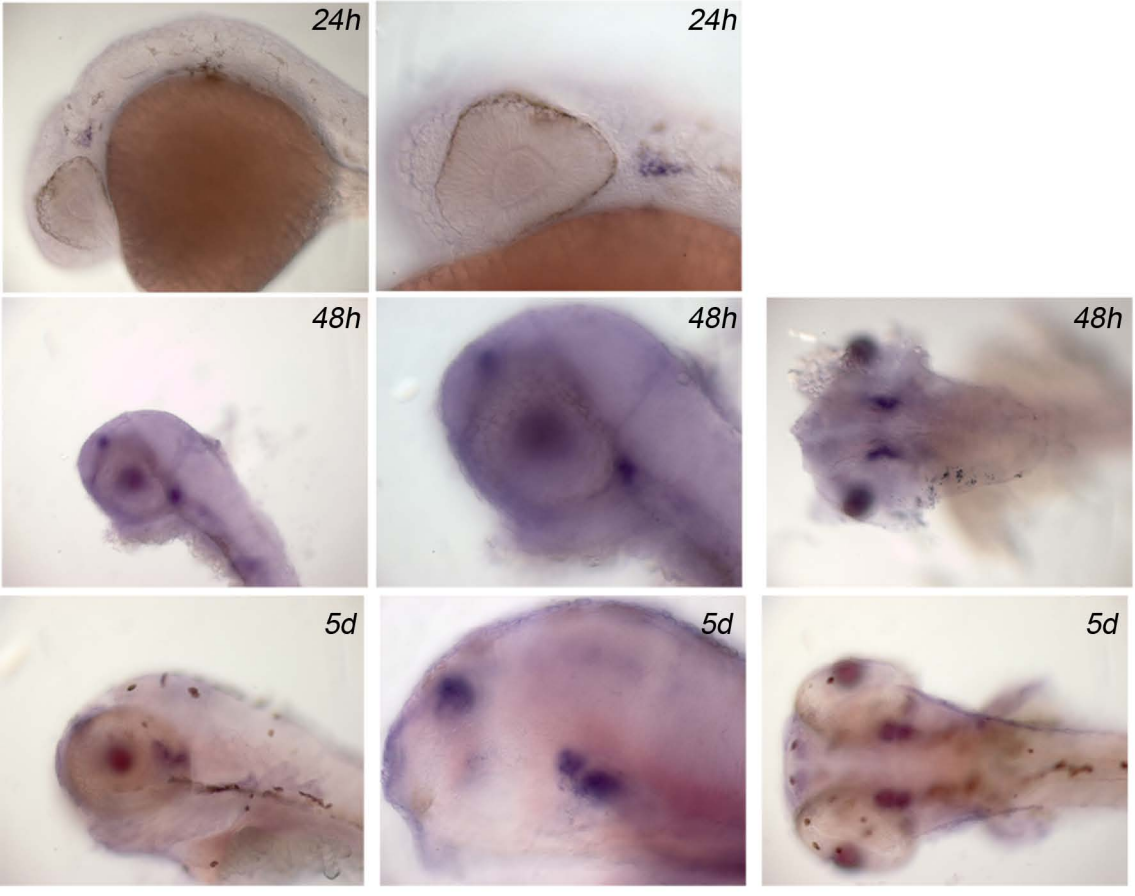
Toro et al.,

Suppl. Fig. 20: neurogranin

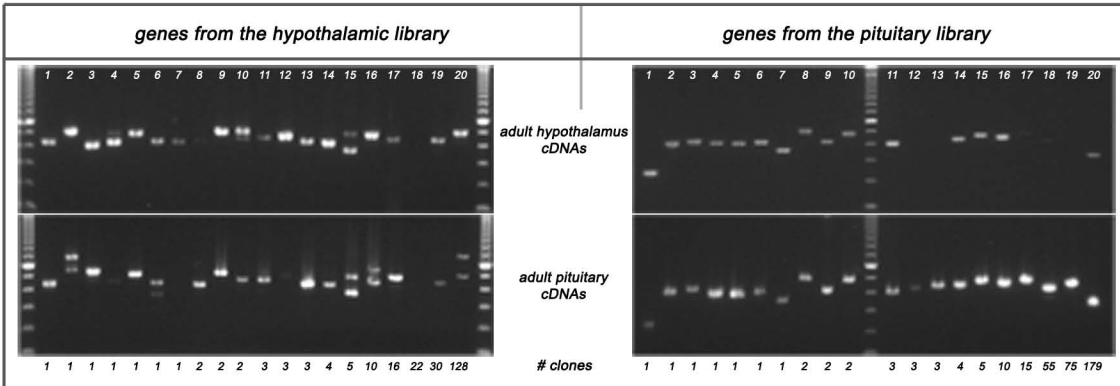


Suppl. Fig. 21: ribonucleoprotein, PTB-binding 2

Toro et al.,



Suppl. Fig. 22 Toro et al.,



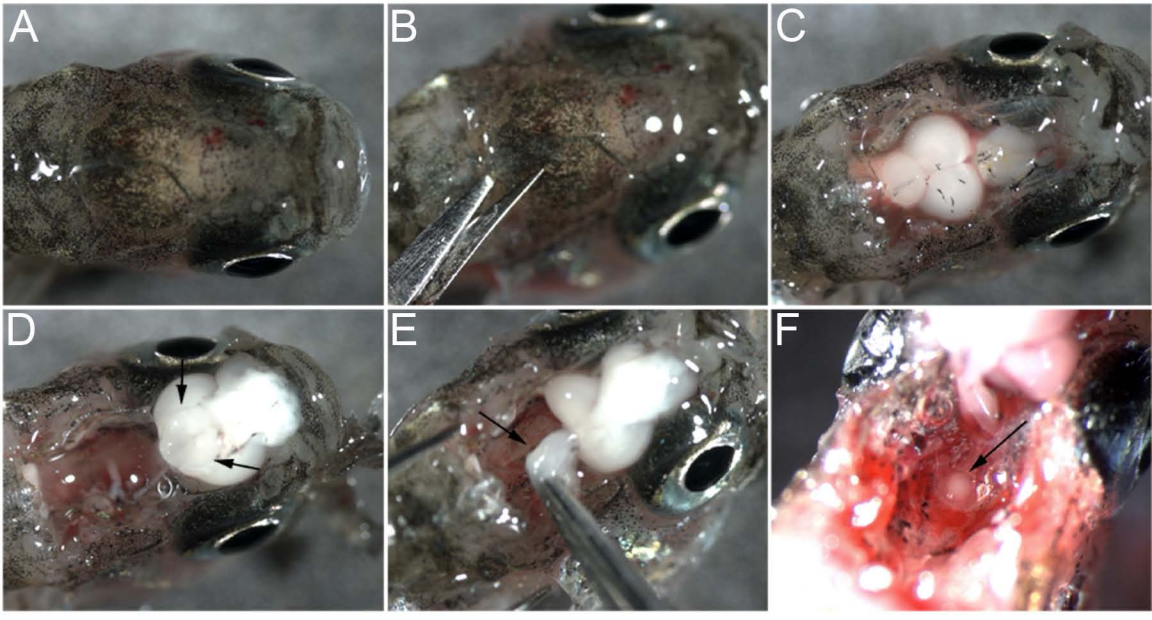
lane	genes	adult hypothalamus cDNAs	adult pituitary cDNAs	
1	syntaxin binding protein 6 -like	V	V	
2	uo:ion006	V	V	*3
3	natriuretic peptide precursor C - like	V	V	*1
4	glutamate receptor, ionotropic, N-methyl D-aspartate 1 b	V	V	*2
5	G protein-coupled receptor 107	V	V	
6	parvalbumin 6	V	V	*2
7	prodynorphin	V	-	
8	interleukin 1 receptor accessory protein-like 2	V	V	
9	pleckstrin and Sec7 domain containing 3 like	V	V	
10	ribonucleoprotein, PTB-binding 2	V	V	*2
11	cytochrome P450, family 19, subfamily A, polypeptide 1b	V	V	
12	dystrobrevin binding protein 1a	V	-	
13	brain-specific angiogenesis inhibitor 1-like	V	V	
14	neurogranin	V	V	
15	adenylate cyclase activating polypeptide 1b	V	V	
16	potassium channel tetramerisation domain containing 4	V	V	*3
17	stathmin 1/oncoprotein 18 b	V	V	*1
18	similar to RIKEN cDNA 1010001J12 gene	-	-	
19	zgc:56140	V	V	
20	ependymin	V	V	*2

lane	genes	adult hypothalamus cDNAs	adult pituitary cDNAs
1	acylphosphatase 1, erythrocyte (common) type	V	V
2	uo:ion001	V	V
3	uo:ion003	V	V
4	neuromedin s	V	V
5	adrenomedullin 2	V	V
6	proline-rich nuclear receptor coactivator 2	V	V
7	serpin peptidase inhibitor, clade I (neuroserpin), member 1	V	V
8	uo:ion004	V	V
9	uo:ion005	V	V
10	zgc:76966	V	V
11	beta thymosin-like protein 2	V	V
12	ring finger protein 41-like	-	V
13	uo:ion002	-	V
14	small inducible cytokine subfamily b (Cys-X-Cys), member a	V	V
15	zgc:109940	V	V
16	cellular retinoic acid binding protein 1a	V	V
17	prolactin	V	V
18	luteinizing hormone beta-subunit	V	V
19	growth hormone	-	V
20	proopiomelanocortin	V	V

Suppl. Fig. 22: gene expression in adult hypothalamus and pituitary tested by PCR.
We performed PCR on adult hypothalamic and pituitary cDNAs for 20 genes represented in the hypothalamic library and 20 genes represented in the pituitary library. The number of clones representing each gene in the library is indicated. The names of the genes and whether or not they are expressed are indicated in the table (V- band amplification, - no band amplification). *1: the bands amplified from different sets of cDNAs have different sizes. *2 : one band was amplified from one set of cDNAs whereas two bands were amplified from the other set of cDNAs. One of the two amplified bands has a size similar to the single amplified band. *3: one band was amplified from one set of cDNAs whereas two bands were amplified from the other set of cDNAs. Both amplified bands had different sizes compared to the single amplified band.

Suppl. Fig. 23

Toro et al.,



Suppl. Fig. 23: Hypothalamus and pituitary dissection.
Hypothalami and pituitaries were dissected from adult fish. To limit stress, fish were anesthetized with MS-222 before chilling on ice. Fish were held such that the dorsal side of the head was visible (A). Cuts were made with scissors through the cranium posterior to the brain and along the midline (B) and the dorsal cranial bones were removed, exposing the brain (C). The brain was cut posteriorly and flipped over to expose the ventral side (D). The 2 lobes located most ventrally in the brain are the hypothalamus (E, arrows). They were removed with forceps (F, arrow). Once the brain was flipped over, the base of the cranial cavity was exposed. Underneath the optic chiasm, a white mass can be observed inside the bones: the pituitary (G, arrow). Bones were carefully removed and the pituitary was removed with forceps.