

Table S1. Summary of changes in gene expression in *arnt2*^{m1055} mutant embryos

Category of analyzed gene expression	Gene	Stages analyzed	Altered expression
Proliferation	<i>mcm5</i>	36, 60 hpf	No
	<i>pcna</i>	36, 60 hpf	No
Patterning+differentiation	<i>arnt2</i>	24 hpf	Yes
	<i>dlx2</i>	32 hpf	No
	<i>dlx4</i>	32 hpf	No
	<i>fez1</i>	48 hpf	No
	<i>foxa2</i>	32 hpf	No
	<i>lim1</i>	32 hpf	No
	<i>nk2.1</i>	32 hpf	No
	<i>nk2.2</i>	32 hpf	No
	<i>nk5.1</i>	32 hpf	No
	<i>otpa</i>	24, 48, 72 hpf	No
	<i>otpb</i>	24, 48, 72 hpf	No
	<i>pou47</i>	24-72 hpf	Yes
	<i>pou50</i>	32 hpf	No
	<i>shh</i>	32 hpf	No
	<i>sim1a</i>	24-72 hpf	No
	<i>sim1b</i>	24-72 hpf	Yes
	<i>sim2</i>	24-72 hpf	No
Neurotransmitter/neurohormone expression	<i>crh</i>	3, 4 dpf	Yes
	<i>itnp</i>	3, 4 dpf	Yes
	<i>sst1</i>	3, 4 dpf	Yes
	<i>th</i>	24-120 hpf	Yes
	<i>trh</i>	3, 4 dpf	Yes
	<i>vsnp</i>	3, 4 dpf	Yes
Others	<i>dat (slc6a3)</i>	78 hpf	Yes
	<i>ddc</i>	78 hpf	Yes
	<i>tphD1</i>	72 hpf	No

Gene expression was analyzed by whole-mount in situ hybridization using embryos derived from a cross of heterozygous carriers of the *arnt2*^{m1055} allele. The tails of the stained embryos were used for genotyping and expression of markers was compared by light microscopy in homozygous mutants and wild-type siblings. All analyzed batches contained at least 50 embryos.