

Table S1. Difference in neural tube, mz and vz size in E11.5 neural tubes from multiple sections from *Cux2* transgenic and *Cux2^{neo/neo}* mutants relative to control littermates

	VZ size	MZ size	Total NT size	NT height	NT width
Control versus <i>Cux2</i> transgenic (% difference; n=7)	108%	114%	111%	107%	110%
Control versus <i>Cux2^{neo/neo}</i> (% difference; n=7)	87%*	51%*	72.2%*	98%	79.3%*

VZ, ventricular zone; MZ, marginal zone; NT, neural tube.
*Statistical significance ($P < 0.05$) by Student's *t*-test.

Table S2. Effect of *Cux2* loss- and gain-of-function on neuronal cell fate in the spinal cord

	Control E10.5	<i>Cux2^{neo/neo}</i> mutants E10.5	<i>Cux2</i> Tg E10.5
Isl1	67.12±14.6*	88.7±14.5	53.7±16.1
P value (<i>t</i> -test) [†]		0.000003	0.053
Lhx1	101.1±21.2	85.2±30.7	144.6±38.1
P value (<i>t</i> -test)		0.0007	0.0058
	<i>Cux2^{neo/neo}</i> /Control (%)	<i>Cux2</i> Tg/Control (%)	<i>Cux2^{neo/neo}</i> / <i>Cux2</i> Tg (%)
Isl1	32	-20 [‡]	61
P value (<i>t</i> -test)			0.000002
Lhx1	-16	43	-70
P value (<i>t</i> -test)			0.0007

Cux2^{neo/neo} mutants display increased numbers of Isl1-positive cells and decreased Lhx1 numbers in the ventral neural tube at E10.5, relative to control littermates. *Cux2* transgenics (Tg), however, display decreased numbers of Isl1-positive cells and increased numbers of Lhx1-positive cells relative to control embryos in E10.5 ventral neural tubes.

*Figures are represented as average values±s.d.

[†]P values were determined using a one-tailed Student's *t*-test with two samples, unequal variance.

[‡]Negative sign denotes decrease.