

Table S2: Coexpression of sexually dimorphic genes with *Esr1* (coronal experiment) in the whole brain.

Gene	Whole Brain				Hypothalamus				
	Gene	Correlation	Correlation Rank	Expression*	Expression Rank	Correlation	Correlation Rank	Expression\$	Expression Rank
<i>Irs4</i>		0.51	1	0.41	14362	0.82	1	7.24	14
<i>Pak3</i>		0.39	9	1.26	9650	0.54	64	1.73	990
<i>Gpr165</i>		0.39	10	1.60	8662	0.55	48	5.09	50
<i>Ecel1</i>		0.36	17	2.25	7303	0.41	404	4.72	60
<i>Glra3</i>		0.26	87	0.60	12639	0.48	159	2.75	251
<i>Gabrg1</i>		0.26	89	0.79	11511	0.29	1467	2.59	315
<i>Nnat</i>		0.24	123	6.42	3277	0.29	1609	2.33	431
<i>Cartpt</i>		0.23	160	0.80	11467	0.18	3716	3.04	210
<i>Greb1</i>		0.17	452	0.36	14918	0.41	414	1.13	3427
<i>Rps6ka6</i>		0.16	480	0.78	11575	0.41	418	1.30	2189
<i>Sytl4</i>		0.16	513	0.18	18245	0.49	128	1.60	1194
<i>Brs3</i>		0.11	1313	0.23	17160	0.48	141	1.19	2871
<i>Cckar</i>		0.10	1555	1.37	9300	-0.09	17153	0.96	5518
<i>Dgkk</i>		-0.02	15812	1.52	8884	0.11	5828	0.67	11142
<i>Chodl</i>		-0.05	20934	0.25	16690	-0.15	21688	0.56	13760

* Average expression across all brain voxels.

\$ Average expression across all hypothalamus voxels, normalized by the average expression across the whole brain.