

**Table S3: Response of *Ers1*-coexpressed and noncoexpressed genes to DES treatment in the anterior and posterior hypothalamus.**

Gene	Correlation	Correlation Rank	Expression*	Expression Rank	Anterior HY (fold change)	Anterior HY (p-value)	Posterior HY (fold change)	Posterior HY (p-value)
<b>Irs4</b>	0.79	1	7.24	1	<b>1.45</b>	0.04	<b>1.26</b>	0.19
Fut8	0.75	2	0.36	3367	1.10	0.32	1.34	0.23
<b>Gdgd2</b>	0.66	4	3.54	42	<b>1.34</b>	0.04	<b>1.08</b>	0.24
<b>Ngb</b>	0.64	6	6.24	8	<b>1.44</b>	0.05	<b>1.24</b>	0.21
Rfx7	0.63	7	0.98	1195	1.16	0.24	1.08	0.14
<b>Adck4</b>	0.62	8	1.98	141	<b>1.31</b>	0.05	<b>1.30</b>	0.09
Ltbp4	0.60	9	1.13	737	1.20	0.12	0.87	0.14
<b>Magel2</b>	0.57	11	5.63	11	<b>1.47</b>	0.06	<b>1.25</b>	0.18
<b>Unc5d</b>	0.57	13	1.52	284	<b>1.32</b>	0.10	<b>1.34</b>	0.08
Bhlhb9	0.57	15	0.62	2473	1.17	0.11	1.02	0.39
Mtss1	4.40E-05	2237	0.70	2231	1.21	0.17	1.18	0.01
<b>Ern2</b>	1.96E-04	2235	0.40	3210	<b>1.70</b>	0.01	<b>1.18</b>	0.20
Olig2	3.04E-04	2234	0.83	1722	1.12	0.23	0.88	0.25
Pip5k1c	3.94E-04	2232	0.73	2119	1.15	0.22	1.01	0.46
Megf11	7.35E-04	2230	0.34	3423	1.27	0.04	0.91	0.17
<b>Chat</b>	7.96E-04	2229	1.33	423	<b>1.36</b>	0.20	<b>1.12</b>	0.40
Ltb	8.01E-04	2228	0.24	3787	1.18	0.19	0.95	0.39
<b>Gnas</b>	9.13E-04	2227	1.10	803	<b>1.33</b>	0.04	<b>0.92</b>	0.20
Tmem150c	1.07E-03	2225	0.76	1992	1.27	0.10	0.90	0.16
Cyb5r1	1.52E-03	2223	0.82	1778	1.20	0.15	1.11	0.22

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