

Supplemental Data Table S6. Effects of norepinephrine (NE), dibutyryl cyclic AMP (DBcAMP) or Forskolin on transcript abundance in cultured pineal glands. This is an expanded version of Table 6. Glands were cultured for 48 hours prior to the initiation of the indicated treatment. Treatment duration was 6 hours. Transcript abundance was measured by qRT-PCR and normalized as described in the Experimental Procedures. Each value is based on results obtained from 3 pools of 3 glands and given as the mean \pm SE and as a treatment/control ratio. * $p < 0.01$; # , genes used for normalization.

Gene Symbol	Control (Copies)	NE (Copies)	NE Control	DBcAMP (Copies)	DBcAMP Control	Forskolin (copies)	Forskolin Control
<i>Aanat</i>	3,760 \pm 338	540,380 \pm 32,900	143.7*	1,070,908 \pm 250,734	284.8*	361,885 \pm 76,316	96.2*
<i>Abca1</i>	2,834 \pm 172	6,883 \pm 199	2.43*	11,934 \pm 2,241	4.21*	6,395 \pm 854	2.26*
<i>Acly</i>	15,093 \pm 1,234	11,899 \pm 1,265	1/1.27	20,157 \pm 2,014	1.34	22,977 \pm 2,300	1.52
<i>Actb#</i>	597,921 \pm 33,046	496,550 \pm 59,503	1/1.20	509,526 \pm 50,888	1/1.17	490,627 \pm 88,506	1/1.22
<i>Alox15</i>	369,814 \pm 26,530	420,870 \pm 12,228	1.14	598,940 \pm 73,964	1.62	589,771 \pm 140,084	1.59
<i>Asmt</i>	14,633 \pm 1,302	16,266 \pm 709	1.11	19,141 \pm 282	1.31	26,395 \pm 7,943	1.80
<i>Ccl9</i>	451 \pm 130	138 \pm 14	1/3.27	129 \pm 33	1/3.50	43 \pm 28	1/10.49
<i>Cd8a</i>	13 \pm 3	10 \pm 1	1/1.30	31 \pm 26	2.45	48 \pm 30	3.78
<i>Cebpb</i>	8,432 \pm 1,435	17,714 \pm 181	2.10	40,272 \pm 3,603	4.78*	20,220 \pm 3,032	2.40
<i>Cited4</i>	119 \pm 2	5,958 \pm 291	50.1*	9,992 \pm 1,157	84.1*	5,840 \pm 1,553	49.1*
<i>Crem</i>	1,091 \pm 30	34,497 \pm 4,657	31.6*	35,513 \pm 4,900	32.5*	30,160 \pm 7,109	27.6*
<i>Ddc</i>	12,516 \pm 1,649	9,703 \pm 545	1/1.29	12,597 \pm 971	1.01	11,675 \pm 2,648	1/1.07
<i>Dio2</i>	3,443 \pm 114	13,486 \pm 1,027	3.92*	37,316 \pm 6,363	10.8*	38,026 \pm 9,200	11.0*
<i>Drd4</i>	42 \pm 23	591 \pm 47	14.0*	1,761 \pm 131	41.9*	844 \pm 277	20.1*
<i>Dusp1</i>	2,890 \pm 222	39,866 \pm 3,108	13.7*	54,066 \pm 2,098	18.7*	16,933 \pm 2,481	5.86*
<i>Egr1</i>	7,492 \pm 285	9,814 \pm 616	1.31	7,307 \pm 496	1/1.03	4,647 \pm 504	1/1.61
<i>Esm1</i>	74,204 \pm 4,042	68,316 \pm 7,033	1/1.09	246,283 \pm 45,992	3.32*	179,840 \pm 28,496	2.42*
<i>Fcer1a</i>	3,443 \pm 114	13,486 \pm 1,027	3.92*	37,316 \pm 6,363	10.8*	38,026 \pm 9,200	11.0*
<i>Fosl2</i>	3,541 \pm 203	10,942 \pm 1,074	3.09*	16,782 \pm 1,974	4.74*	10,318 \pm 486	2.91*
<i>Galnt14</i>	220 \pm 16	58 \pm 10	1/3.79*	102 \pm 15	1/2.16 *	73 \pm 10	1/3.01*
<i>Gapdh#</i>	372,002 \pm 9,474	371,575 \pm 2,930	1.00	492,534 \pm 55,230	1.32	370,866 \pm 83,839	1.00
<i>Gch1</i>	82,499 \pm 3,009	103,457 \pm 6,643	1.25	97,140 \pm 5,593	1.18	81,608 \pm 20,032	1/1.01
<i>Hhip</i>	126 \pm 1	2,139 \pm 90	16.9*	4,613 \pm 2,406	36.5*	7,444 \pm 2,629	59.0*
<i>Id1</i>	22,627 \pm 1,878	53,412 \pm 10,042	2.36	67,490 \pm 7,346	2.98*	44,554 \pm 12,443	1.97
<i>Id3</i>	31,860 \pm 1,518	33,302 \pm 6,219	1.05	37,259 \pm 5,746	1.17	25,218 \pm 6,639	1/1.26

<i>Il18</i>	8,247 ± 599	11,199 ± 843	1.36	12,867 ± 776	1.56*	12,006 ± 4,337	1.46
<i>Kpna2</i>	1,061 ± 133	727 ± 63	1/1.46	1,275 ± 122	1.20	1,307 ± 293	1.23
<i>Lta</i>	21 ± 3	28 ± 7	1.36	43 ± 9	2.06	38 ± 8	1.82
<i>Map3k5</i>	180 ± 6	217 ± 23	1.20	442 ± 53	2.45*	391 ± 92	2.17
<i>Mat2a</i>	41,915 ± 5,066	382,449 ± 20,816	9.12*	460,883 ± 46,890	11.0*	284,240 ± 35,635	6.78*
<i>Mfrp</i>	165 ± 89	17 ± 2	1/9.71	242 ± 131	1.46	25 ± 10	1/6.67
<i>Neurod1</i>	20,131 ± 1,227	18,112 ± 1,130	1.11	22,784 ± 2,353	1.13	25,657 ± 7,795	1.27
<i>Npy1r</i>	183 ± 3	48 ± 4	1/3.81*	68 ± 3	1/2.69*	91 ± 19	1/2.01
<i>Nr4a2</i>	1,025 ± 130	1,809 ± 257	1.76	5,198 ± 240	5.07*	2,486 ± 442	2.42
<i>Opn1sw</i>	25 ± 3	35 ± 13	1.39	37 ± 8	1.48	24 ± 3	1/1.03
<i>Per2</i>	408 ± 47	450 ± 36	1.10	551 ± 38	1.35	608 ± 115	1.49
<i>Rnr1#</i>	3,232,758 ± 243,761	3,981,825 ± 511,784	1.23	3,000,323 ± 512,915	1/1.08	5,456,589 ± 2,713,637	1.69
<i>Slc6a17</i>	135 ± 17	593 ± 15	4.40*	1,530 ± 225	11.3*	1,459 ± 238	10.8*
<i>Slc15a1</i>	62 ± 13	29,750 ± 2,167	479.3*	29,314 ± 1,428	472.2*	10,847 ± 1,879	174.7*
<i>Snf1lk</i>	4,327 ± 323	46,436 ± 3,364	10.7*	51,385 ± 3,594	11.8*	32,355 ± 804	7.48*
<i>St8sia5</i>	88 ± 6	144 ± 16	1.64	200 ± 25	2.27*	157 ± 33	1.78
<i>Tnf</i>	178 ± 32	172 ± 35	1/1.03	38 ± 3	1/ 4.68*	120 ± 22	1/1.48
<i>Tph1</i>	785,890 ± 163,346	749,609 ± 32,003	1/1.05	838,493 ± 21,644	1.07	647,918 ± 101,038	1/1.21
<i>Ttr</i>	446,404 ± 125,114	346,788 ± 46,967	1/1.29	517,017 ± 116,682	1.16	334,966 ± 124,419	1/1.33
<i>Ush2a</i>	1,612 ± 125	646 ± 43	1/2.50*	637 ± 19	1/1.53*	676 ± 73	1/2.38*