

P2RX7 in dopaminergic neurons of the ventral periaqueductal gray mediates HTWP acupuncture-induced consciousness in traumatic brain injury

Huiling Tang^{1, #}, Siru Qin^{1, #}, Wei Li^{1, #}, Xuyi Chen², Luis Ulloa³, Qiumei Zhu⁴, Baohu Liu⁵, Yinan Gong¹, Yadan Zhao¹, Songtao Wang¹, Shanshan Li¹, Yongming Guo^{1,6}, Yi Guo^{1,7, *}, Zhifang Xu^{1,6, *}

Supplemental Table 1. The gene-specific primers used in this study

Gene	Forward primer (5'→3')	Reverse primer (5'→3')	Product size
<i>Actb</i>	CCTTCCTGGGTATGGAATCCTG	CTTCTGCATCCTGTCAGCAATG	152
<i>P2rx3</i>	TGAAGGGTACTGCGTCAACC	CATGGAACCCTGGGAAGAGG	120
<i>P2rx7</i>	CTTGGAACCCTCAGTGTCCC	CCAGGTTGCAGTCCCAGTAG	126
<i>Trpv1</i>	AGATCCATGAACCCGAGTGC	CGATCACCTCCAGAACCGAG	132
<i>Tacr1</i>	ATGGACTCTGATCTCTTCCCCA	TCCATATCACCCTACGTTGCC	148
<i>Cacna1d</i>	TCTGTGTTCCGGTGTGTACG	AGAGCAGCAACAGCAGAGAG	127
<i>Drd3</i>	GTCTGAGGCTGCATCCCATT	GCTGCAGGTGTGACAAAAGG	135
<i>Exoc1</i>	TGCCATCAAAGAGAGCCCTG	CCAGGTGCAGGAGATGAAGG	103
<i>Exoc3l1</i>	ACCGAAGCCGTGAAGTACAG	CTGTCTCAGGGCTTCTCGTG	149
<i>Fgr</i>	AGCTTCTCTCCGATGGCAAC	ATGTGGTCGCCTCTGTTCTG	115
<i>Fgb</i>	AAAACGGAGGATGGACGGTC	CAATATTCGCCTGGCAAGCC	145

Supplemental Table 2. Co-expression of differentially expressed genes among sham group, TBI group and acupuncture group

GeneSymbol	sham VS TBI	TBI VS Acu
	Foldchange	Foldchange
LOC102554819	+25.10896545	-20.35582364
Dguok	+23.59157331	-25.39890233
Kcnn3	+14.06372158	-2.575019771
Rab17	+12.7407397	-8.269854687
Klk1c8 ///		
LOC100911764	+12.65752186	-3.310581445
Bank1	+9.290566639	-2.862524323
Grm8	+4.768353525	-2.745858439
Reg3a	+4.701432188	-3.534222152
LOC102553732	+4.701356064	-2.558798954
Spam1	+4.575485814	-3.895508788
Mx2	+3.791177326	-9.124215883
Usp49	+3.631270441	-7.766938254
Slco1a1	+3.455499897	-2.255844213
Ccl7	+3.360354833	-2.280647047
Reg3b	+3.049109204	-2.981717037
Mab21l2	+3.024504101	-2.340734216
Cenpn	+2.992187437	-2.755892521
Gpat2	+2.884098936	-5.854101852
Zbtb40	+2.851929223	-2.334138451
Ifrd2	+2.825332028	-2.206867285
Chit1	+2.704120957	-2.971875163
Comp	+2.65502853	-2.233618588
Kctd16	+2.508820147	-2.885717553
Parpbb	+2.492197407	-2.220176186

Fga	+2.458768465	-3.583778955
LOC100910650	+2.434198274	-2.091065801
Chrm2	+2.427457365	-2.667836438
Scnn1g	+2.393094239	-2.327378221
Il27ra	+2.389911572	-2.8249272
Imp21	+2.350356742	-2.611982974
Fancc	+2.318632703	-2.648010867
Pcsk9	+2.273592176	-2.393986819
Fam26f	+2.267059995	-2.302601266
Fbln1	+2.261857497	-2.126752659
Fas	+2.227119627	-2.036580925
Pax8	+2.220091781	-2.316939585
Vnn1	+2.157482856	-12.47739629
Pomc	+2.155464616	-2.031607768
Myh6	+2.150480031	-2.132029973
Cd93	+2.111015531	-2.230232785
Klrb1a /// RGD2301395	+2.073757171	-2.412962106
Fev	+2.010602469	-5.084489341
Kcnj12	-2.003283561	+2.963446491
Crh	-2.190490813	+2.615185502
Nphp4	-2.236131393	+2.491737299
Dio2	-2.236488388	+3.286194759
Dlx5	-2.283089884	+2.889601933
Pou3f1	-2.289146205	+2.163309291
Foxg1	-2.364778907	+4.38898578
Rpe65	-2.407339867	+2.292191631
Iqck	-2.424835434	+3.226211922
Iba57 ///		
LOC100912081	-2.658877214	+2.274905945

LOC102547720	-2.698719582	+2.288774379
Zfp488	-2.747191732	+2.218958849
Agap3	-2.822726484	+2.320671803
Cklf	-2.865370194	+13.06871316
Slc6a13	-3.017458854	+2.213886875
LOC100910851 ///		
LOC100911797 ///		
Spink5	-3.126972593	+2.795936859
Atp2a2	-3.405450841	+5.174499752
Sim1	-3.921846947	+3.713953601
Pstpip1	-4.259145112	+4.190862719
LOC688090 /// RT1-Bb	-5.102074848	+4.814521551
Slc10a2	-8.095956628	+9.478111954
LOC102549282	-11.05961031	+4.447115294
Aqp6	-14.02835445	+5.711655521
