

# Supplementary

Supplementary Table. 1 Genome wide association of SNPs with RNA expression of DUSP14 gene (GRCh38/hg38), ( $P = 5 \times 10^{-8}$ ).

CHR17: POS	SNP	GENE	Allele	BETA	P
37482412	rs853233	intergenic	G/A	1.43179	2.11E-20
37487939	rs853194	intergenic	C/A	1.41845	4.68E-20
37445289	rs853202	TADA2A (intronic)	G/A	-1.36677	8.61E-20
37448492	rs2030315	TADA2A (intronic)	G/T	-1.36327	1.03E-19
37427296	rs853219	TADA2A (intronic)	T/C	-1.35546	1.28E-19
37449060	rs2522963	TADA2A (intronic)	G/A	-1.35546	1.28E-19
37463009	rs853193	TADA2A (intronic)	G/A	-1.35546	1.28E-19
37464292	rs853205	TADA2A (intronic)	C/T	-1.35546	1.28E-19
37478961	rs2074412	intergenic	C/T	-1.35546	1.28E-19
37424298	rs2411157	TADA2A (intronic)	G/T	-1.35898	1.92E-19
37418382	rs9910338	TADA2A (intronic)	G/A	-1.34287	2.51E-19
37405930	rs9910344	TADA2A (intronic)	C/A	-1.34287	2.51E-19
37447343	rs853203	TADA2A (intronic)	C/G	1.4169	2.76E-19
37488149	rs853195	intergenic	A/C	1.38548	5.27E-19
37489236	rs853198	intergenic(promoter)	C/A	1.38548	5.27E-19
37398591	rs113593735	ACACA (intronic)	A/G	1.39214	5.31E-19
37399875	rs1112174	ACACA (intronic)	A/T	1.39214	5.31E-19
37399966	rs1112173	ACACA (intronic)	C/T	1.39214	5.31E-19
37406385	rs72828246	ACACA (5'-UTR)	A/G	1.39214	5.31E-19
37408740	rs56186148	TADA2A (intronic)	T/A	1.39214	5.31E-19
37423316	rs72828253	TADA2A (intronic)	A/G	1.39214	5.31E-19
37423712	rs7501983	TADA2A (intronic)	A/G	1.39214	5.31E-19
37427567	rs853220	TADA2A (intronic)	T/C	1.39214	5.31E-19
37431406	rs853225	TADA2A (intronic)	C/A	1.39214	5.31E-19
37440818	rs853229	TADA2A (intronic)	G/A	1.39214	5.31E-19
37456216	rs2522965	TADA2A (intronic)	G/C	1.39214	5.31E-19
37456349	rs2680718	TADA2A (intronic)	C/T	1.39214	5.31E-19
37456514	rs2522966	TADA2A (intronic)	T/C	1.39214	5.31E-19
37457003	rs4795200	TADA2A (intronic)	G/A	1.39214	5.31E-19
37461654	rs853191	TADA2A (intronic)	T/A	1.39214	5.31E-19
37461827	rs853192	TADA2A (intronic)	C/G	1.39214	5.31E-19
37466352	rs853208	TADA2A (intronic)	A/C	1.39214	5.31E-19
37468060	rs853211	TADA2A (intronic)	C/T	1.39214	5.31E-19
37468868	rs4795203	TADA2A (intronic)	C/T	1.39214	5.31E-19
37469564	rs7217375	TADA2A (intronic)	C/T	1.39214	5.31E-19
37473376	rs79925212	TADA2A (intronic)	T/A	1.39214	5.31E-19
37474926	rs2107104	TADA2A (intronic)	A/G	1.39214	5.31E-19
37478916	rs2522972	intergenic	T/C	1.39214	5.31E-19

37482945	rs853234	intergenic	T/C	1.39214	5.31E-19
37402018	rs878520	ACACA (intronic)	G/C	1.38809	6.28E-19
37405930	rs9890344	ACACA (intronic)	C/T	-1.33285	6.75E-19
37496487	rs11870754	DUSP14 (intronic)	G/A	1.37487	6.81E-19
37497045	rs9906140	DUSP14 (intronic)	A/G	1.37487	6.81E-19
37498286	rs8064314	DUSP14 (intronic)	G/A	1.37487	6.81E-19
37500858	rs853214	DUSP14 (intronic)	C/T	1.37487	6.81E-19
37501027	rs853215	DUSP14 (intronic)	G/A	1.37487	6.81E-19
37508198	rs12603185	DUSP14 (intronic)	C/T	1.37487	6.81E-19
37439788	rs853228	TADA2A (intronic)	T/G	1.38151	6.81E-19
37424992	rs864356	TADA2A (intronic)	G/A	-1.33176	7.26E-19
37470196	rs2522968	TADA2A (intronic)	A/G	1.37665	9.30E-19
37424633	rs865484	TADA2A (intronic)	C/T	-1.33609	1.02E-18
37506219	rs11653332	DUSP14 (intronic)	C/A	1.37081	1.07E-18
37463891	rs864083	TADA2A (intronic)	T/C	1.38037	1.24E-18
37491071	rs865483	DUSP14 (intronic)	C/A	1.37528	1.30E-18
37433186	rs860468	TADA2A (intronic)	C/G	1.37051	1.38E-18
37449113	rs2522964	TADA2A (intronic)	C/T	1.37724	1.51E-18
37514833	rs1063215	SYNRG (3'-UTR)	G/A	1.37361	1.73E-18
37454281	rs853231	TADA2A (intronic)	G/A	-1.31233	2.04E-18
37473104	rs6607275	TADA2A (intronic)	C/T	1.36803	2.59E-18
37458360	rs2680720	TADA2A (intronic)	T/A	-1.30938	3.52E-18
37459133	rs11655957	TADA2A (intronic)	C/T	-1.30938	3.52E-18
37418677	rs4795197	TADA2A (intronic)	C/T	-1.29166	3.60E-18
37514090	rs1016678	intergenic	G/A	1.34301	3.79E-18
37514283	rs1016680	intergenic	C/A	1.3416	5.64E-18
37451857	rs853230	TADA2A (intronic)	A/T	-1.28955	6.40E-18
37484317	rs2680721	intergenic	C/A	1.34925	6.88E-18
37474975	rs2107105	TADA2A (intronic)	T/C	1.325	2.92E-17
37485474	rs7213617	intergenic	G/A	1.23476	2.40E-16
37495449	rs853217	DUSP14 (intronic)	A/G	-1.26287	2.89E-16
37515526	rs58781505	SYNRG (3'-UTR)	T/C	-1.25547	8.90E-16
37490119	rs853199	DUSP14 (intronic)	C/T	1.23847	1.79E-15
37490026	rs861197	DUSP14 (intronic)	T/A	1.15849	5.08E-15
37538680	rs3110625	SYNRG (intronic)	C/T	1.14081	2.21E-14
37506177	rs8076711	DUSP14 (intronic)	A/G	1.1517	4.08E-14
37524480	rs6607277	SYNRG (intronic)	A/G	1.11624	1.90E-13
37524614	rs2158235	SYNRG (intronic)	C/T	1.11624	1.90E-13
37531282	rs3110628	SYNRG (intronic)	G/C	1.10298	2.79E-13
37539039	rs1034686	SYNRG (intronic)	A/T	1.09702	3.06E-13
37422074	rs146703540	TADA2A (intronic)	C/A	1.08577	5.26E-13
37393220	rs12945602	ACACA (intronic)	G/C	-1.14787	7.46E-13
37421223	rs72828251	TADA2A (intronic)	T/G	1.00217	9.64E-13
37387280	rs56116846	C17of78 (intronic)	C/T	1.08478	1.54E-12
37383917	rs7215774	C17of78 (intronic)	T/C	1.08632	1.73E-12
37394253	rs12939093	ACACA (intronic)	C/A	-1.1092	5.37E-12

37422075	rs140227147	TADA2A (intronic)	T/A	1.00106	1.11E-11
37422076	rs144012031	TADA2A (intronic)	T/G	1.00106	1.11E-11
37490169	rs862490	DUSP14 (intronic)	C/T	1.02528	1.51E-11
35747284	rs113885331	C17orf78 (intronic)	C/A	1.02759	2.71E-11
37539585	rs3110624	SYNRG (intronic)	G/T	1.02366	4.49E-11
37539832	rs3094501	SYNRG (intronic)	A/G	0.988071	1.92E-10
37606444	rs17660636	SYNRG (intronic)	A/G	0.95766	2.70E-09
37586818	rs17660494	SYNRG (intronic)	G/C	0.93413	7.02E-09
37420652	rs9896461	TADA2A (intronic)	C/G	-0.94543	1.80E-08
37421433	rs2522971	TADA2A (intronic)	T/C	-0.94462	1.86E-08
37538240	rs2074409	SYNRG (intronic)	G/T	-0.93458	3.89E-08
37398114	rs12451423	ACACA (intronic)	C/T	-1.06882	4.03E-08

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Supplementary Table. 2 Genome wide association of SNPs with RNA expression of TADA2A gene (GRCh38/hg38), ( $P = 5 \times 10^{-8}$ ).

CHR17: POS	SNP	GENE	Allele	BETA	P
37487939	rs853194	intergenic	C/A	0.609104	5.86E-10
37506177	rs8076711	DUSP14 (intronic)	A/G	0.588745	6.21E-10
37471601	rs2522970	TADA2A (intronic)	G/A	-0.55756	1.27E-09
37514090	rs1016678	intergenic	G/A	0.588059	1.90E-09
37447343	rs853203	TADA2A (intronic)	C/G	0.599205	2.31E-09
37514283	rs1016680	TADA2A (intronic)	C/A	0.581554	3.35E-09
37473104	rs6607275	TADA2A (intronic)	C/T	0.585785	3.76E-09
37482412	rs853233	intergenic	G/A	0.58166	3.76E-09
37496487	rs11870754	DUSP14 (intronic)	G/A	0.578901	3.98E-09
37497045	rs9906140	DUSP14 (intronic)	A/G	0.578901	3.98E-09
37498286	rs8064314	DUSP14 (intronic)	G/A	0.578901	3.98E-09
37500858	rs853214	DUSP14 (intronic)	C/T	0.578901	3.98E-09
37501027	rs853215	DUSP14 (intronic)	G/A	0.578901	3.98E-09
37508198	rs12603185	DUSP14 (intronic)	C/T	0.578901	3.98E-09
37488149	rs853195	intergenic	A/C	0.579062	4.71E-09
37489236	rs853198	DUSP14 (promoter)	C/A	0.579062	4.71E-09
37463891	rs864083	TADA2A (intronic)	T/C	0.582484	4.71E-09
37398591	rs113593735	ACACA (intronic)	A/G	0.581029	4.97E-09
37399875	rs1112174	ACACA (intronic)	A/T	0.581029	4.97E-09
37399966	rs1112173	ACACA (intronic)	C/T	0.581029	4.97E-09
37406385	rs72828246	ACACA (5'-UTR)	A/G	0.581029	4.97E-09
37408740	rs56186148	TADA2A (intronic)	T/A	0.581029	4.97E-09
37423316	rs72828253	TADA2A (intronic)	A/G	0.581029	4.97E-09
37423712	rs7501983	TADA2A (intronic)	A/G	0.581029	4.97E-09

37427567	rs853220	TADA2A (intronic)	T/C	0.581029	4.97E-09
37431406	rs853225	TADA2A (intronic)	C/A	0.581029	4.97E-09
37440818	rs853229	TADA2A (intronic)	G/A	0.581029	4.97E-09
37456216	rs2522965	TADA2A (intronic)	G/C	0.581029	4.97E-09
37456349	rs2680718	TADA2A (intronic)	C/T	0.581029	4.97E-09
37456514	rs2522966	TADA2A (intronic)	T/C	0.581029	4.97E-09
37457003	rs4795200	TADA2A (intronic)	G/A	0.581029	4.97E-09
37461654	rs853191	TADA2A (intronic)	T/A	0.581029	4.97E-09
37461827	rs853192	TADA2A (intronic)	C/G	0.581029	4.97E-09
37466352	rs853208	TADA2A (intronic)	A/C	0.581029	4.97E-09
37468060	rs853211	TADA2A (intronic)	C/T	0.581029	4.97E-09
37468868	rs4795203	TADA2A (intronic)	C/T	0.581029	4.97E-09
37469564	rs7217375	TADA2A (intronic)	C/T	0.581029	4.97E-09
37473376	rs79925212	TADA2A (intronic)	T/A	0.581029	4.97E-09
37474926	rs2107104	TADA2A (intronic)	A/G	0.581029	4.97E-09
37478916	rs2522972	intergenic	T/C	0.581029	4.97E-09
37482945	rs853234	intergenic	T/C	0.581029	4.97E-09
37421223	rs72828251	TADA2A (intronic)	T/G	0.511015	5.49E-09
37514833	rs1063215	SYNRG (3'-UTR)	G/A	0.579311	5.54E-09
37422075	rs140227147	TADA2A (intronic)	T/A	0.534326	5.62E-09
37422076	rs144012031	TADA2A (intronic)	T/G	0.534326	5.62E-09
37449113	rs2522964	TADA2A (intronic)	C/T	0.579613	5.65E-09
37439788	rs853228	TADA2A (intronic)	T/G	0.57547	5.91E-09
37470196	rs2522968	TADA2A (intronic)	A/G	0.57515	6.03E-09
37402018	rs878520	ACACA (intronic)	G/C	0.573248	7.81E-09
37422074	rs146703540	TADA2A (intronic)	C/A	0.538538	1.01E-08
37433186	rs860468	TADA2A (intronic)	C/G	0.566806	1.02E-08
37506219	rs11653332	DUSP14 (intronic)	C/A	0.561865	1.26E-08
37484317	rs2680721	intergenic	C/A	0.564318	1.33E-08
37491071	rs865483	DUSP14 (intronic)	C/A	0.549918	3.15E-08
37490169	rs862490	DUSP14 (intronic)	C/T	0.517928	4.58E-08

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