

Supplementary Table 1. ROIs with enriched association in the sleeplessness symptom of bipolar mania vs. non-sleeplessness symptom of bipolar mania analysis

	Position	SNP ID	Allele	Minor allele frequency	Odds ratio	Confidence interval	p-value	Permuted P	Gene	
ROI1	chr3:2800840	rs9842663	A	0.158	0.4446	0.28–0.70	4.68×10 ⁻⁴	3.99×10 ⁻⁴	<i>CNTN4</i>	
	chr3:2801373	rs7646671	A	0.088	0.3268	0.19–0.56	4.08×10 ⁻⁵	2.7×10 ⁻⁵	<i>CNTN4</i>	
	chr3:2801545	rs954882	A	0.088	0.3345	0.20–0.57	5.47×10 ⁻⁵	3.5×10 ⁻⁵	<i>CNTN4</i>	
	chr3:2805717	rs7636727	A	0.324	0.5380	0.37–0.77	7.89×10 ⁻⁴	6.46×10 ⁻⁴	<i>CNTN4</i>	
	chr3:2810174	rs9847255	T	0.393	0.5310	0.37–0.76	5.54×10 ⁻⁴	3.34×10 ⁻⁴	<i>CNTN4</i>	
	chr3:2811270	rs7628425	G	0.326	0.5189	0.36–0.75	3.92×10 ⁻⁴	3.34×10 ⁻⁴	<i>CNTN4</i>	
	chr3:2811418	rs4493418	C	0.394	0.5495	0.39–0.78	9.58×10 ⁻⁴	6.49×10 ⁻⁴	<i>CNTN4</i>	
ROI2	chr3:173900745	rs644758	C	0.485	2.0230	1.40–2.93	1.87×10 ⁻⁴	1.28×10 ⁻⁴	<i>NCEH1</i>	
	chr3:17390082	rs645195	G	0.485	2.0170	1.39–2.92	2.07×10 ⁻⁴	1.54×10 ⁻⁴	<i>NCEH1</i>	
	chr3:173901585	rs648462	C	0.486	2.0170	1.39–2.92	2.07×10 ⁻⁴	1.54×10 ⁻⁴	<i>NCEH1</i>	
	chr3:173917854	rs10936734	T	0.486	1.9860	1.38–2.86	2.29×10 ⁻⁴	1.41×10 ⁻⁴		
	chr3:173927789	rs9850611	T	0.230	2.9060	1.70–4.98	1.03×10 ⁻⁴	5.73×10 ⁻⁵		
	chr3:173931350	rs11714195	T	0.490	1.8980	1.32–2.74	6.14×10 ⁻⁴	4.95×10 ⁻⁴		
	chr3:173931478	rs10513703	T	0.475	2.0410	1.41–2.95	1.4×10 ⁻⁴	1.05×10 ⁻⁴		
	chr3:173962541	rs10513705	C	0.437	2.2080	1.50–3.25	5.76×10 ⁻⁵	3.9×10 ⁻⁵	<i>ECT2</i>	
	chr3:174009782	rs4547731	G	0.405	2.2110	1.49–3.29	8.74×10 ⁻⁵	6.21×10 ⁻⁵	<i>ECT2</i>	
	chr3:174010671	rs11714381	A	0.211	3.2460	1.83–5.78	6.15×10 ⁻⁵	3.4×10 ⁻⁵	<i>ECT2</i>	
	chr3:174010728	rs11714390	A	0.437	2.2030	1.50–3.24	5.96×10 ⁻⁵	4.1×10 ⁻⁵	<i>ECT2</i>	
	chr3:174010746	rs11706689	C	0.436	2.2120	1.50–3.25	5.48×10 ⁻⁵	4.26×10 ⁻⁵	<i>ECT2</i>	
	chr3:174040518	rs7374229	T	0.245	2.8600	1.70–4.81	7.38×10 ⁻⁵	4×10 ⁻⁵		
	chr3:174041031	rs9833643	C	0.440	1.9880	1.37–2.89	3.27×10 ⁻⁴	2.6×10 ⁻⁴		
	chr3:174055783	rs981996	C	0.153	3.1180	1.61–6.04	7.37×10 ⁻⁴	3.79×10 ⁻⁴		
	ROI3	chr5:125426329	rs11241861	G	0.400	0.5065	0.35–0.73	2.49×10 ⁻⁴	1.82×10 ⁻⁴	
		chr5:125427667	rs6595661	G	0.400	0.4942	0.34–0.71	1.46×10 ⁻⁴	8.96×10 ⁻⁵	
chr5:125440310		rs10064839	G	0.356	0.5091	0.35–0.74	3.68×10 ⁻⁴	2.57×10 ⁻⁴		
chr5:125456690		rs3860119	A	0.376	0.4963	0.34–0.72	1.99×10 ⁻⁴	1.4×10 ⁻⁴		
chr5:125499301		rs10463817	G	0.255	0.4874	0.42–0.94	2.51×10 ⁻⁴	1.96×10 ⁻⁴		
chr5:125522599		rs3898767	A	0.310	0.4658	0.32–0.68	9.26×10 ⁻⁵	6.89×10 ⁻⁵		
chr5:125534917		rs3909804	A	0.306	0.4424	0.30–0.65	3.07×10 ⁻⁵	1.6×10 ⁻⁵		
chr5:125561057		rs7718533	T	0.307	0.4575	0.31–0.67	6.18×10 ⁻⁵	3.9×10 ⁻⁵		
chr5:125589800		rs1834899	G	0.369	0.5095	0.35–0.74	4.87×10 ⁻⁴	3.68×10 ⁻⁴		
chr5:125613473		rs9327401	T	0.365	0.5020	0.34–0.73	3.57×10 ⁻⁴	2.35×10 ⁻⁴		
ROI4		chr8:26963854	rs7823902	C	0.268	0.4970	0.34–0.73	2.95×10 ⁻⁴	2.17×10 ⁻⁴	
	chr8:26978975	rs4623440	T	0.291	0.4594	0.31–0.67	7.24×10 ⁻⁵	5.14×10 ⁻⁵		
	chr8:27002660	rs7005743	T	0.292	0.4846	0.34–0.69	8.16×10 ⁻⁵	6.85×10 ⁻⁵		
	chr8:27004930	rs6997246	T	0.293	0.4857	0.34–0.70	8.66×10 ⁻⁵	6.56×10 ⁻⁵		
ROI5	chr9:93734511	rs6479386	T	0.355	2.1790	1.45–3.28	1.97×10 ⁻⁴	1.49×10 ⁻⁴	<i>ROR2</i>	
	chr9:93734832	rs6479387	C	0.377	2.2960	1.54–3.42	4.41×10 ⁻⁵	4×10 ⁻⁵	<i>ROR2</i>	
	chr9:93744295	rs10125466	G	0.352	2.2580	1.48–3.44	1.45×10 ⁻⁴	1.28×10 ⁻⁴	<i>ROR2</i>	
	chr9:93756263	rs6479389	C	0.375	2.4520	1.63–3.70	1.87×10 ⁻⁵	1.9×10 ⁻⁵		
	chr9:93769048	rs7867072	G	0.376	2.5390	1.67–3.85	1.2×10 ⁻⁵	1.6×10 ⁻⁵		
	chr9:93860267	rs1892268	C	0.375	2.4300	1.61–3.67	2.26×10 ⁻⁵	2×10 ⁻⁵	<i>SPTLC1</i>	
ROI6	chr9:93944438	rs3858095	A	0.286	2.1440	1.37–3.35	8.35×10 ⁻⁴	8.59×10 ⁻⁴	<i>LINC00475</i>	
	chr12:42055495	rs10506226	C	0.208	2.3030	1.41–3.77	9.06×10 ⁻⁴	6.86×10 ⁻⁴	<i>ADAMTS20</i>	
	chr12:42105565	rs10785430	G	0.474	0.4673	0.32–0.68	5.53×10 ⁻⁵	4×10 ⁻⁵	<i>ADAMTS20</i>	
	chr12:42149850	rs10748358	C	0.329	0.4803	0.32–0.71	2.55×10 ⁻⁴	1.6×10 ⁻⁴	<i>ADAMTS20</i>	
	chr12:42167236	rs7978592	C	0.334	0.4890	0.33–0.72	3.69×10 ⁻⁴	2.51×10 ⁻⁴	<i>ADAMTS20</i>	
	chr12:42179388	rs10880510	C	0.334	0.4890	0.33–0.72	3.69×10 ⁻⁴	2.51×10 ⁻⁴	<i>ADAMTS20</i>	
	chr12:42179960	rs10748363	G	0.334	0.4920	0.33–0.73	4.25×10 ⁻⁴	2.73×10 ⁻⁴	<i>ADAMTS20</i>	
	chr12:42202884	rs10785439	T	0.340	0.4559	0.31–0.68	9.54×10 ⁻⁵	6.39×10 ⁻⁵	<i>ADAMTS20</i>	
chr12:42244314	rs11182163	T	0.389	0.5159	0.35–0.76	7.6×10 ⁻⁴	5.56×10 ⁻⁴			

Supplementary Table 1. ROIs with enriched association in the sleeplessness symptom of bipolar mania vs. non-sleeplessness symptom of bipolar mania analysis (continued)

	Position	SNP ID	Allele	Minor allele frequency	Odds ratio	Confidence interval	p-value	Permuted P	Gene	
ROI7	chr17:51527590	rs17212802	T	0.141	0.3516	0.22–0.56	1.3×10^{-5}	1.3×10^{-5}		
	chr17:51528462	rs7214413	G	0.135	0.3676	0.23–0.60	6.45×10^{-5}	4.33×10^{-5}		
	chr17:51539114	rs8078180	G	0.131	0.3786	0.23–0.63	1.52×10^{-4}	7.22×10^{-5}		
	chr17:51539478	rs8077081	A	0.128	0.3848	0.23–0.63	1.82×10^{-4}	1.03×10^{-4}		
	chr17:51556430	rs17212942	A	0.124	0.3969	0.24–0.66	3.06×10^{-4}	1.97×10^{-4}		
	chr17:51559408	rs1367694	A	0.124	0.3969	0.24–0.66	3.06×10^{-4}	1.97×10^{-4}		
	chr17:51570809	rs10491196	C	0.126	0.3969	0.24–0.66	3.06×10^{-4}	1.97×10^{-4}		
	chr17:51576678	rs10491197	G	0.127	0.4199	0.25–0.70	7.57×10^{-4}	5.93×10^{-4}		
	chr17:51599835	rs1990497	T	0.126	0.3910	0.24–0.65	2.48×10^{-4}	1.43×10^{-4}	<i>ANKFN1</i>	
	chr17:51614653	rs9908935	T	0.127	0.3910	0.24–0.65	2.48×10^{-4}	1.43×10^{-4}	<i>ANKFN1</i>	
	chr17:51617844	rs9911043	A	0.129	0.3769	0.23–0.63	1.95×10^{-4}	1.2×10^{-4}	<i>ANKFN1</i>	
	ROI8	chr17:65077822	rs8067828	A	0.393	0.4824	0.33–0.70	9.33×10^{-5}	6.08×10^{-5}	
		chr17:65095115	rs8064275	C	0.190	0.4744	0.32–0.71	3.2×10^{-4}	2.14×10^{-4}	
chr17:65095146		rs8064932	A	0.315	0.4448	0.31–0.64	1.07×10^{-5}	6×10^{-6}		
chr17:65096191		rs2040622	C	0.315	0.4440	0.31–0.64	1.01×10^{-5}	5×10^{-6}		
chr17:65107636		rs7209856	C	0.190	0.4560	0.31–0.68	1.16×10^{-4}	8.25×10^{-5}	<i>LINC01483</i>	
chr17:65126171		rs2716184	A	0.373	0.4896	0.35–0.69	5.6×10^{-5}	3.4×10^{-5}	<i>LINC01483</i>	
chr17:65126419		rs2716182	C	0.373	0.4896	0.35–0.69	5.6×10^{-5}	3.4×10^{-5}	<i>LINC01483</i>	
chr17:65127259		rs2158039	C	0.373	0.4896	0.35–0.69	5.6×10^{-5}	3.4×10^{-5}	<i>LINC01483</i>	

ROI: region of interest, SNP: single nucleotide polymorphism