

Supplementary Materials

SIRT1 rs3758391 and major depressive disorder: new data and meta-analysis

Wei Tang¹, Yan Chen², Xinyu Fang², Yewei Wang², Weixing Fan³, Chen Zhang^{2,*}

¹ Department of Psychiatry, Wenzhou Kangning Hospital, Wenzhou Medical University, Wenzhou 325000, China

² Department of Biochemistry, Shanghai Mental Health Center, Shanghai Jiao Tong University School of Medicine, Shanghai 200030, China

³ Department of Psychiatry, Jinhua Second Hospital, Jinhua 321016, China

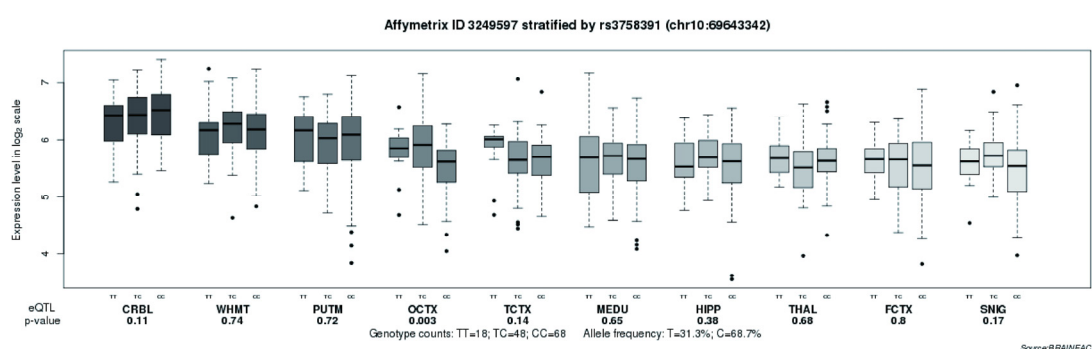


Fig. S1 Association of rs3758391 with *SIRT1* mRNA expression levels in ten brain regions (Affymetrix ID 3249597). Data were extracted from the BRAINEAC database (<http://caprica.genetics.kcl.ac.uk/BRAINEAC/>). SNIG, substantia nigra; PUTM, putamen (at the level of the anterior commissure); MEDU, inferior olivary nucleus (sub-dissected from the medulla); THAL, thalamus (at the level of the lateral geniculate nucleus); OCTX, occipital cortex; HIPP, hippocampus; FCTX, frontal cortex; TCTX, temporal cortex; WHMT, intralobular white matter; CRBL, cerebellar cortex.

Table S1. Estimate of linkage disequilibrium statistics between rs12415800 and rs375891 polymorphisms

SNP	rs12415800	rs375891
rs12415800	-	0.818*
rs375891	0.098 [#]	-

* D' value, [#] r^2 value.

Table S2. Summary of case-control studies (up to March 2018) between rs3758391 of *SIRT1* and MDD

Study	Year	Allele	<i>N</i>	Ethnicity	OR/beta	95% CI	<i>P</i>
PGC ¹	2012	T	18759	European	1.05	1.01-1.10	0.02
Kovanen <i>et al.</i> ²	2015	T	3911	Finnish	1.19	1.01-1.40	0.04
Our study reported here	2018	T	1413	Chinese	0.78	0.64-0.94	0.01

PGC, Psychiatric Genomics Consortium

References

1. Ripke S, Wray NR, Lewis CM, Hamilton SP, Weissman MM, Breen G, *et al.* A mega-analysis of genome-wide association studies for major depressive disorder. *Mol. Psychiatry* 2013, 18: 497-511.
2. Kovanen L, Donner K, Partonen T. SIRT1 polymorphisms associate with seasonal weight variation, depressive disorders, and diastolic blood pressure in the general population. *PLoS One* 2015, 10: e0141001.