Table S1. Characteristics of circadian genes and SNPs in this study

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SNP | Ref | Alt | Gene | Related phenotype | MAF in East Asian**\*** |
| rs140701 | C | T | SLC6A4 | PD (Panic disorder) and SAD (Social anxiety disorder) in European Americans ([PMID 18663369](https://www.ncbi.nlm.nih.gov/pubmed/18663369?dopt=Abstract)) | 0.50 |
| rs3813034 | C | A | SLC6A4 | PD in African American, European American, Hispanic American (PMID: 19969287) | 0.18 |
| 5-HTTLPR | L | S | SLC6A4 |  major depressive disorder (PMID 19272758)Obsessive compulsive disorder (OCD) (PMID 17375136) andSAD (PMID 18629430) | 0.13 |
| STin2 | 10 | 12 | SLC6A4 | OCD (PMID 18191318) | 0.15 |
| rs6295 | G | C | HTRA1 | Major depression disorder (MDD) (PMID 19358877) andShort-term response of anti-depressants in (PMID 19560507) | 0.20 |
| rs6313 | G | A | HTR2A | MDD (PMID 19590397) and anti-depressants response (PMID 16642436) | 0.41 |
| rs4680 | A | G | COMT | MDD ([PMID 20071037](https://www.ncbi.nlm.nih.gov/pubmed/20071037?dopt=Abstract)) and anti-depressant paroxetine response (PMID 18989660) | 0.32 |

**\***: Data are from 1000Genome website (<https://www.internationalgenome.org/>). PMID: PubMed Unique Identifier.

Table S2. The primer sequence in PCR mixture

|  |  |
| --- | --- |
| Primer Name | Primer Sequence |
| rs140701F | GAAGAGGAGGCTGGGACCTGAG |
| rs140701R | CTGTTACCCACCCCCAGGGTTA |
| rs3813034F | TGGGTGGCAGAGCATGTTGTAG |
| rs3813034R | CCATGCAAGCTTGTGAGTCTGTG |
| 5-HTTLPR F | CGGGATGCGGGGGAATACTGGT |
| 5-HTTLPR R | TTGCCGCTCTGAATGCCAGCAC |
| STin2 F | GCCTGGCGAGATTTGACTTTTC |
| STin2 R | GGCTGCGAGTAGAGGCTGTGAC |
| rs6295F | GGAGCCTGAATGGGAAGGTGAA |
| rs6295R | CGCGAGAACGGAGGTAGCTTTT |
| rs6313F | GAGAGGCACCCTTCACAGGAAAG |
| rs6313R | ACACCAGCCTCAGTGTTACAGAGTG |
| rs4680F | ATCGAGATCAACCCCGACTGTG |
| rs4680R | GGGCCTGGTGATAGTGGGTTTT |

Table S3. the probe sequence in probe mixture

|  |  |  |
| --- | --- | --- |
| Probe Name | Target Allele | Probe Sequence (5' phosphorated) |
| rs140701FC | C | TTCCGCGTTCGGACTGATATGAGGAAAACTCAGCCACAACAACAGTGAC |
| rs140701FT | T | TACGGTTATTCGGGCTCCTGTGAGGAAAACTCAGCCACAACAACAGTGAT |
| rs140701FP |  | AATTCTCATCACAAGACCTTATGTGTGATTTTTTTT |
| rs3813034FA | A | TACGGTTATTCGGGCTCCTGTCTCCATACACAATTGAGTTGGTAGAATTTGTGAA |
| rs3813034FC | C | TTCCGCGTTCGGACTGATATCTCCATACACAATTGAGTTGGTAGAATTTGTGAC |
| rs3813034FP |  | TGTAAGAAAAATTTGGGGAATTCATATATTTGTT |
| rs6295FC | C | TGTTCGTGGGCCGGATTAGTTGGAAGAAGACCGAGTGTGTCTACC |
| rs6295FG | G | TCTCTCGGGTCAATTCGTCCTTTGGAAGAAGACCGAGTGTGTCTACG |
| rs6295FP |  | TTTTTAAAAAGCTACCTCCGTTCtcgTTTTTTTTTTT |
| rs6313FA | A | TGTTCGTGGGCCGGATTAGTAAATGCATCAGAAGTGTTAGCTTCTGCA |
| rs6313FG | G | TCTCTCGGGTCAATTCGTCCTTAAATGCATCAGAAGTGTTAGCTTCTACG |
| rs6313FP |  | GAGTTAAAGTCATTACTGTAGAGCCTGGTGTTTTTTT |
| rs4680FA | A | TACGGTTATTCGGGCTCCTGTGATGGTGGATTTCGCTGTCA |
| rs4680FG | G | TTCCGCGTTCGGACTGATATGATGGTGGATTTCGCTGTCG |
| rs4680FP |  | TGAAGGACAAGGTGTGCATGCTTTTTTTTTTTT |

Table S4. Power of the study at current sample size

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| SNP | Type of test | MAF# | Ψ**\*** | Power | Required sample size(cases vs controls) | Whether the present study met the sample size requirement (YES/NO) |
| rs140701 | Allelic | 0.50 | 2.0 | 0.8 | 136 vs 136 | YES |
| rs3813034 | Allelic | 0.18 | 2.0 | 0.8 | 167 vs 167 | YES |
| 5-HTTLPR | Allelic | 0.13 | 2.0 | 0.8 | 141 vs 141 | YES |
| STin2 | Allelic | 0.15 | 2.0 | 0.8 | 207 vs 207  | YES |
| rs6295 | Allelic | 0.20 | 2.0 | 0.8 | 172 vs 172 | YES |
| rs6313 | Allelic | 0.41 | 2.0 | 0.8 | 132 vs 132 | YES |
| rs4680 | Allelic | 0.32 | 2.0 | 0.8 | 138 vs 138 | YES |

#:The minor allele frequency in Chinees Han population from 1000Genome (https://www.internationalgenome.org/). **\***: The odds ratio of exposure in cases relative to controls.