**S1 Table.** Summary of twelve variants previously reported to be causal for Mendelian sleep and circadian conditions, including the variant frequencies catalogued in gnomAD.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **PubMed ID** | **Gene** | **Variant** | **CHR:BPa** | **rsIDb** | **Trait** | **gnomAD AAFf** | **gnomAD EAFg** |
| 33065013 | *GRM1* | S458A | 6:146352435 | rs151255685 | FNSSc | 2x10-4 | 2x10-4 |
| 33065013 | *GRM1* | R889W | 6:146426563 | rs768023437 | FNSSc | 3x10-5 | 6x10-5 |
| 31619542 | *NPSR1* | Y206H | 7:34827538 | rs1406844918 | FNSSc | 4x10-6 | 9x10-6 |
| 31473062 | *ADRB1* | A187V | 10:114044692 | rs776439595 | FNSSc | 4x10-5 | 8x10-5 |
| 19679812 | *DEC2/BHLHE41* | P384R | 12:26122364 | rs121912617 | FNSSc | 3x10-5 | 5x10-5 |
| 28388406 | *CRY1* | c.1657+3A>C | 12:106992962 | rs184039278 | DSPDd | 4x10-3 | 5x10-3 |
| 26903630 | *PER3* | P415A | 1:7809893 | rs150812083 | FASPe | 6x10-3 | 6x10-3 |
| 26903630 | *PER3* | H417R | 1:7809900 | rs139315125 | FASPe | 6x10-3 | 6x10-3 |
| 11232563 | *PER2* | PER2S662G | 2:238257003 | rs121908635 | FASPe | - | - |
| 27529127 | *CRY2* | A260T | 11:45867648 | rs201220841 | FASPe | 6x10-5 | 1x10-4 |
| 31138685 | *TIMELESS* | R1081X | 12:56418347 | rs1465092391 | FASPe | 8x10-6 | 2x10-5 |
| 15800623 | *CSNK1D* | T44A | 17:82265743 | rs104894561 | FASPe | 4x10-6 | 9x10-6 |

achromosome and base-pair position defined by the Genome Reference Consortium Human Build 38; breference SNP (rs) cluster identifier of variant; cfamilial natural short sleep; ddelayed sleep phase disorder; efamilial advanced sleep phase; fallele frequency of minor allele across all ancestries catalogued in gnomAD (version 2.1). gallele frequency of minor allele within samples of European ancestry (excluding Finnish) catalogued in gnomAD (version 2.1).