

Supplementary Table 1. Statistical Values of Supplementary Figure 1.

Figure/Panel (Time bin)	Figure Title	Type of test	F value	p value	Significance
S1.A	Wake (ZT1-3)	2-way ANOVA (genotype)	$F(1,108) = 1.252$	0.2901	ns
S1.B	NREM (ZT1-3)	2-way ANOVA (genotype)	$F(1,108) = 10.2$	0.0018	**
S1.C	REM (ZT1-3)	2-way ANOVA (genotype)	$F(1,108) = 15.54$	0.0001	***
S1.D	Wake (ZT4-6)	2-way ANOVA (genotype)	$F(1,108) = 12.09$	0.0007	
S1.E	NREM (ZT4-6)	2-way ANOVA (genotype)	$F(1,108) = 29.14$	<0.0001	****
	β	Šídák's multiple comparisons test		0.0342	*
	Low γ	Šídák's multiple comparisons test		0.0161	*
	High γ	Šídák's multiple comparisons test		0.0079	**
S1.F	REM (ZT4-6)	2-way ANOVA (genotype)	$F(1,108) = 21.07$	<0.0001	****
	Low γ	Šídák's multiple comparisons test		0.0432	*
S1.G	Wake (ZT7-9)	2-way ANOVA (genotype)	$F(1,108) = 6.437$	0.0126	*
S1.H	NREM (ZT7-9)	2-way ANOVA (genotype)	$F(1,108) = 34.36$	<0.0001	****
	β	Šídák's multiple comparisons test		0.0255	*
	Low γ	Šídák's multiple comparisons test		0.0124	*
	High γ	Šídák's multiple comparisons test		0.0041	**
S1.I	REM (ZT7-9)	2-way ANOVA (genotype)	$F(1,108) = 25.45$	0.0005	
		Šídák's multiple comparisons test		0.0134	*
		Šídák's multiple comparisons test		0.0489	*
S1.J	Wake (ZT10-12)	2-way ANOVA (genotype)	$F(1,108) = 18.65$	<0.0001	****
S1.K	NREM (ZT10-12)	2-way ANOVA (genotype)	$F(1,108) = 34.36$	<0.0001	****
	β	Šídák's multiple comparisons test		0.0259	*
	Low γ	Šídák's multiple comparisons test		0.0262	*
	High γ	Šídák's multiple comparisons test		0.0099	**
S1.L	REM (ZT10-12)	2-way ANOVA (genotype)	$F(1,108) = 28.17$	<0.0001	****
	β	Šídák's multiple comparisons test		0.0458	*

Low γ	Šídák's multiple comparisons test	0.0148	*
High γ	Šídák's multiple comparisons test	0.0485	*

n.s: not significant, *, p < 0.05; **, p < 0.01; ***, p < 0.005; ****, p < 0.0001.