

Table 4. Two-way ANOVA for sleep analysis (Related to Figs. 4, 5, 7, 9, 11, S1, S2)

			Group		Time		Interaction		
Data			DFn, DFd	F	p	F	p	F	p
Fig. 4A	Total sleep		2, 122	10.45	<0.0001	263.7	<0.0001	7.493	<0.0001
	Sleep episodes		2, 122	2.509	0.0856	13.84	<0.0001	6.577	<0.0001
	P(wake)		2, 122	12.11	<0.0001	196.7	<0.0001	6.504	<0.0001
Dunnett's multiple comparisons									
R58E02/dTrpA1 vs R58E02/+			R58E02/dTrpA1 vs dTrpA1/+			Summary			
	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	0.9756	0.8063	0.9645	0.9806	0.9865	0.0277	ns	ns	ns
ZT1-2	0.2459	0.1827	0.1497	0.9896	0.8710	0.5054	ns	ns	ns
ZT2-3	0.0007	0.0031	0.0008	0.9049	0.9681	0.8836	ns	ns	ns
ZT3-4	0.0004	0.0006	0.0001	0.9980	0.8952	0.6851	ns	ns	ns
ZT4-5	<0.0001	0.2933	<0.0001	0.5611	0.3347	0.3473	ns	ns	ns
ZT5-6	0.1148	0.0319	0.3845	0.0009	<0.0001	0.0111	ns	*	ns
ZT6-7	<0.0001	0.4502	<0.0001	<0.0001	0.0048	0.0052	****	ns	**
ZT7-8	<0.0001	0.0182	<0.0001	<0.0001	0.0010	0.0017	****	*	**
ZT8-9	<0.0001	0.0018	<0.0001	<0.0001	0.0016	<0.0001	****	**	****
ZT9-10	<0.0001	0.0036	0.0002	0.0026	0.1240	0.0026	**	ns	**
ZT10-11	0.0038	0.0090	<0.0001	0.0677	0.0406	0.0133	ns	*	*
ZT11-12	0.028	0.0108	0.0377	0.9890	0.9447	0.5754	ns	ns	ns
ZT12-13	0.9747	0.1524	0.7279	0.9914	0.0032	0.7997	ns	ns	ns
ZT13-14	0.9163	0.0007	0.7183	0.8430	0.0080	0.9813	ns	**	ns
ZT14-15	0.6078	<0.0001	0.8074	0.0909	0.0100	0.2094	ns	*	ns
ZT15-16	0.3992	<0.0001	0.2807	0.0159	0.1387	0.0447	ns	ns	ns
ZT16-17	0.7681	<0.0001	0.9273	0.0006	0.0019	0.0011	ns	**	ns
ZT17-18	0.2873	0.0029	0.2764	0.0279	0.0041	0.0005	ns	**	ns
ZT18-19	>0.9999	<0.0001	0.1640	0.5784	0.0019	0.1675	ns	**	ns
ZT19-20	0.9898	0.0060	0.8583	0.4328	0.0124	0.2425	ns	*	ns
ZT20-21	0.8351	0.0123	0.9942	0.8891	0.1945	0.8824	ns	ns	ns
ZT21-22	0.4996	0.0129	0.9399	0.7758	0.2699	0.7315	ns	ns	ns
ZT22-23	0.7468	0.0010	0.9476	0.3676	0.1273	0.2538	ns	ns	ns
ZT23-24	0.5168	0.0728	0.2801	0.3308	0.0447	0.9372	ns	ns	ns
ZT24-25	0.3769	0.6626	0.9080	0.1401	0.4485	0.2559	ns	ns	ns
ZT25-26	0.1607	0.1756	0.2289	0.9114	0.5869	0.8935	ns	ns	ns
ZT26-27	0.2468	0.0393	0.0542	0.6703	0.6408	0.8712	ns	ns	ns
ZT27-28	0.6703	0.1063	0.0501	0.0053	0.1016	0.6792	ns	ns	ns
ZT28-29	0.1917	0.7103	0.0849	0.0345	0.7491	0.0855	ns	ns	ns

	Data	DFn, DFd	Group		Time		Interaction		
			F	p	F	p	F	p	
Fig. 4B	Total sleep	2, 104	9.135	0.0002	228.7	<0.0001	5.274	<0.0001	
	Sleep episodes	2, 104	11.32	<0.0001	21.39	<0.0001	4.321	<0.0001	
	P(wake)	2, 104	8.225	0.0005	178.2	<0.0001	5.579	<0.0001	
Dunnett's multiple comparisons									
R58E024/shi ^{ts1} vs R58E02/+			R58E02/shi ^{ts1} vs shi ^{ts1} /+				Summary		
	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	0.0181	0.0094	-	0.8051	0.9767	-	ns	ns	-
ZT1-2	<0.0001	<0.0001	<0.0001	0.3105	0.6616	0.9997	ns	ns	ns
ZT2-3	0.0079	0.0022	0.0014	0.9927	0.6353	0.8757	ns	ns	ns
ZT3-4	0.0250	0.0310	0.0027	0.8589	0.5669	0.9968	ns	ns	ns
ZT4-5	0.0084	0.1151	0.0043	0.2469	0.6219	0.8930	ns	ns	ns
ZT5-6	0.0163	0.7762	0.0018	0.2830	0.6890	0.1746	ns	ns	ns
ZT6-7	0.0001	0.1505	0.0027	0.0010	0.4891	0.1983	**	ns	ns
ZT7-8	0.6738	0.4714	0.0147	0.0012	0.0017	0.0526	ns	ns	ns
ZT8-9	0.9676	0.6733	0.8487	0.3096	0.4022	0.1828	ns	ns	ns
ZT9-10	0.8522	0.2422	0.3108	0.0011	0.9952	0.6962	ns	ns	ns
ZT10-11	0.9966	0.8254	0.0683	0.0039	0.8336	<0.0001	ns	ns	ns
ZT11-12	0.0268	0.2804	0.0678	0.9538	0.2620	0.8916	ns	ns	ns
ZT12-13	0.2144	0.3250	0.8537	0.0083	0.0513	0.1085	ns	ns	ns
ZT13-14	0.8022	0.5470	0.9997	0.7276	0.9974	0.9802	ns	ns	ns
ZT14-15	0.0108	0.0149	0.0022	0.0005	0.5129	0.0040	*	ns	**
ZT15-16	0.0470	<0.0001	0.2140	0.0015	0.0002	0.0010	*	***	ns
ZT16-17	0.0093	0.0029	0.0174	0.0003	0.0004	0.0009	**	**	*
ZT17-18	0.1503	0.0012	0.0009	0.0008	0.0031	<0.0001	ns	**	***

ZT18-19	0.3069	0.0002	0.2621	0.0013	<0.0001	0.0012	ns	***	ns
ZT19-20	0.7608	0.0005	0.4389	<0.0001	0.0182	0.0005	ns	*	ns
ZT20-21	0.9067	0.0016	0.1881	0.0002	<0.0001	0.0001	ns	**	ns
ZT21-22	0.1312	0.0174	0.3207	0.0004	0.0008	0.0008	ns	*	ns
ZT22-23	0.7829	0.4124	0.3113	0.0014	0.0055	0.0031	ns	ns	ns
ZT23-24	0.9600	0.1246	0.6941	0.0003	0.0081	0.0009	ns	ns	ns
ZT24-25	0.5007	0.5953	0.4108	0.0642	0.0241	0.0114	ns	ns	ns
ZT25-26	0.1666	0.3557	0.6301	0.3275	0.2272	0.0052	ns	ns	ns
ZT26-27	0.1584	0.2923	0.0050	0.7385	0.9887	0.9384	ns	ns	ns
ZT27-28	0.5233	0.5943	0.5007	0.5311	0.6781	0.6761	ns	ns	ns
ZT28-29	0.7872	0.1363	0.7345	0.0305	0.4297	0.2494	ns	ns	ns
ZT29-30	0.4707	0.4440	0.9097	<0.0001	0.9572	0.0419	ns	ns	ns
ZT30-31	0.4530	0.4523	0.2749	0.0001	0.0805	<0.0001	ns	ns	ns

			Group		Time		Interaction		
Data			DFn, DFd	F	p	F	p	F	p
Fig. 4C	Total sleep		2, 113	21.95	<0.0001	346.6	<0.0001	16.94	<0.0001
	Sleep episodes		2, 113	38.34	<0.0001	13.33	<0.0001	5.525	<0.0001
	P(wake)		2, 112	7.799	0.0007	247.6	<0.0001	11.82	<0.0001
Dunnett's multiple comparisons									
c316/shi ^{ts1} vs c316/+			c316/shi ^{ts1} vs shi ^{ts1} /+				Summary		
	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	0.1048	0.1433	0.8009	0.0053	0.0490	0.1680	ns	ns	ns
ZT1-2	0.1867	0.1312	0.0051	0.1948	0.1097	0.0001	ns	ns	**
ZT2-3	0.1621	0.1417	0.2292	0.2487	0.8214	0.0791	ns	ns	ns
ZT3-4	0.1985	0.1068	0.2110	0.6183	0.9873	0.7170	ns	ns	ns
ZT4-5	0.7876	0.0814	0.9244	0.0131	0.9763	0.0451	ns	ns	ns
ZT5-6	0.0374	0.0008	0.9977	0.9417	0.0011	0.0011	ns	**	ns
ZT6-7	<0.0001	<0.0001	<0.0001	0.5373	0.2511	0.0134	ns	ns	*
ZT7-8	0.0244	0.1735	<0.0001	0.0637	0.1970	0.5041	ns	ns	ns
ZT8-9	0.9933	0.0032	0.5954	<0.0001	0.0703	0.0461	ns	ns	ns
ZT9-10	0.5792	0.7133	0.9481	<0.0001	0.0308	<0.0001	ns	ns	ns
ZT10-11	0.9478	0.5248	0.8991	<0.0001	0.9233	<0.0001	ns	ns	ns
ZT11-12	0.0028	0.0011	0.0042	0.7002	0.1342	0.1334	ns	ns	ns
ZT12-13	0.1545	0.3935	0.1160	0.0986	0.2958	0.8508	ns	ns	ns
ZT13-14	0.0174	0.0229	0.1881	0.0002	0.2108	0.0232	*	ns	ns
ZT14-15	0.0002	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	****	****	****
ZT15-16	<0.0001	<0.0001	<0.0001	0.0003	0.0031	0.0004	****	**	****
ZT16-17	0.0002	<0.0001	<0.0001	0.0001	<0.0001	0.0001	****	****	****
ZT17-18	<0.0001	<0.0001	<0.0001	0.0008	0.0169	0.0001	****	*	****
ZT18-19	<0.0001	<0.0001	<0.0001	0.0003	0.0001	0.0007	****	****	****
ZT19-20	<0.0001	<0.0001	<0.0001	0.0007	0.0011	0.0009	****	**	****
ZT20-21	<0.0001	<0.0001	<0.0001	0.0001	0.0016	0.0003	****	**	****
ZT21-22	0.0137	0.0010	0.0005	0.0055	0.0032	0.0011	*	**	**
ZT22-23	0.0045	0.0118	0.0711	<0.0001	0.0008	<0.0001	**	*	ns
ZT23-24	0.0127	0.0011	0.0025	0.0002	0.0005	0.0003	*	**	**
ZT24-25	0.8349	0.3781	0.1102	0.3149	0.3449	0.0019	ns	ns	ns
ZT25-26	0.0147	0.0113	0.0099	0.5632	0.0657	0.0407	ns	ns	*
ZT26-27	<0.0001	0.0001	0.0386	0.6998	0.0850	0.3568	ns	ns	ns
ZT27-28	0.0095	0.0964	0.0063	0.2883	0.8494	0.9278	ns	ns	ns
ZT28-29	0.0003	0.0028	0.0061	0.0001	0.9295	0.0663	****	ns	ns

			Group		Time		Interaction		
Data			DFn, DFd	F	p	F	p	F	p
Fig. 4D	Total sleep		2, 63	12.78	<0.0001	104.1	<0.0001	6.416	<0.0001
	Sleep episodes		2, 63	11.13	<0.0001	8.574	<0.0001	5.329	<0.0001
	P(wake)		2, 56	3.284	0.0448	68.15	<0.0001	5.795	<0.0001
Dunnett's multiple comparisons									
VT064246/shi ^{ts1} vs VT064246/+			VT064246/shi ^{ts1} vs shi ^{ts1} /+				Summary		
	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	0.6014	0.1033	0.8663	0.1096	0.1622	0.2061	ns	ns	ns
ZT1-2	0.8298	0.0350	0.8296	0.1747	0.9427	0.1743	ns	ns	ns
ZT2-3	0.5753	0.1187	0.9827	0.4390	0.8938	0.1038	ns	ns	ns
ZT3-4	0.0919	0.0350	0.4160	>0.9999	0.1342	0.4869	ns	ns	ns
ZT4-5	0.0232	0.9933	0.6256	0.0151	0.7952	0.9207	*	ns	ns

ZT5-6	0.8659	0.9558	0.3036	0.2953	0.6880	0.5350	ns	ns	ns
ZT6-7	<0.0001	0.6634	0.0008	0.2530	0.2875	0.5392	ns	ns	ns
ZT7-8	0.4548	0.4910	0.0004	0.0632	0.2992	0.6562	ns	ns	ns
ZT8-9	0.0003	0.7733	0.2305	0.0014	0.4441	0.2841	**	ns	ns
ZT9-10	<0.0001	0.0052	0.0122	0.0002	0.3562	0.0101	***	ns	*
ZT10-11	<0.0001	<0.0001	0.0258	0.2955	0.5178	0.4076	ns	ns	ns
ZT11-12	<0.0001	0.0002	0.0683	0.5733	0.9356	0.9960	ns	ns	ns
ZT12-13	0.0002	0.0662	0.1071	0.2021	0.8383	0.6134	ns	ns	ns
ZT13-14	0.0058	0.1391	0.0659	0.0515	0.1148	0.4398	ns	ns	ns
ZT14-15	0.0020	0.1087	0.1218	0.0104	0.1525	0.2061	*	ns	ns
ZT15-16	0.0008	0.0056	0.0835	0.0071	0.0106	0.0883	**	*	ns
ZT16-17	0.0035	0.0813	0.1588	0.0617	0.0130	0.1196	ns	ns	ns
ZT17-18	0.0012	0.0392	0.1032	0.0093	0.0781	0.1483	**	ns	ns
ZT18-19	0.0215	0.0525	0.2687	0.0325	0.0466	0.0915	*	ns	ns
ZT19-20	0.0395	0.1104	0.2266	0.1014	0.0598	0.1230	ns	ns	ns
ZT20-21	0.1632	0.0208	0.4819	0.1634	0.0194	0.2061	ns	*	ns
ZT21-22	0.1451	0.1005	0.7523	0.6687	0.0731	0.4734	ns	ns	ns
ZT22-23	0.6272	0.1125	0.4157	0.9994	0.4994	0.4309	ns	ns	ns
ZT23-24	0.0636	0.0111	0.5989	0.4181	0.0054	0.2601	ns	*	ns
ZT24-25	0.0007	0.0004	0.2471	0.7169	0.6568	0.2810	ns	ns	ns
ZT25-26	0.0005	0.0002	0.3645	0.5520	0.6667	0.2427	ns	ns	ns
ZT26-27	0.0031	0.0326	0.3271	0.9418	0.5021	0.5079	ns	ns	ns
ZT27-28	0.0045	0.0179	0.3211	0.4364	0.6784	0.5074	ns	ns	ns
ZT28-29	0.0044	0.0946	0.3225	0.6624	0.9991	0.2044	ns	ns	ns

	Data	DFn, DFd	Group		Time		Interaction	
			F	p	F	p	F	p
Fig. 5A	Total sleep	2, 120	32.18	<0.0001	343.8	<0.0001	12.58	<0.0001
	Sleep episodes	2, 120	27.39	<0.0001	16.31	<0.0001	5.367	<0.0001
	P(wake)	2, 120	39.01	<0.0001	264.0	<0.0001	11.71	<0.0001

Dunnett's multiple comparisons

R58E02/dTrpA1 vs R58E02/+			R58E02/dTrpA1 vs dTrpA1/+			Summary		
Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	0.9086	0.8154	0.5343	0.9342	0.9490	0.6511	ns	ns
ZT1-2	0.0383	0.0006	0.0511	0.8805	0.2848	0.9609	ns	ns
ZT2-3	<0.0001	<0.0001	<0.0001	0.9143	0.9886	0.9971	ns	ns
ZT3-4	<0.0001	0.0097	<0.0001	0.9898	0.7700	0.6867	ns	ns
ZT4-5	<0.0001	0.0165	<0.0001	0.3169	0.5500	0.9712	ns	ns
ZT5-6	<0.0001	0.9966	<0.0001	0.0024	0.9747	0.0659	**	ns
ZT6-7	<0.0001	<0.0001	<0.0001	<0.0001	0.0010	0.0004	****	***
ZT7-8	<0.0001	<0.0001	<0.0001	>0.9999	0.8920	0.9271	ns	ns
ZT8-9	<0.0001	<0.0001	<0.0001	0.4656	0.7701	0.9989	ns	ns
ZT9-10	<0.0001	<0.0001	<0.0001	0.9999	0.9275	0.7883	ns	ns
ZT10-11	0.0072	0.0086	<0.0001	0.4619	0.5395	0.7640	ns	ns
ZT11-12	0.2348	0.0630	0.6876	0.0365	0.0433	0.1069	ns	ns
ZT12-13	<0.0001	0.0010	0.0003	0.0001	0.0050	0.3617	***	**
ZT13-14	<0.0001	0.4330	<0.0001	0.0005	0.9703	0.0067	***	ns
ZT14-15	0.0019	0.1080	0.0003	0.0004	0.0718	0.0001	**	***
ZT15-16	0.0058	0.2221	0.0081	0.0014	0.7349	0.0084	**	**
ZT16-17	0.0151	0.7221	0.0038	0.0155	0.2442	0.0349	*	*
ZT17-18	0.5671	0.9007	0.5788	0.4124	0.9989	0.3067	ns	ns
ZT18-19	0.9169	0.6717	0.4843	0.6928	0.8824	0.8054	ns	ns
ZT19-20	0.5228	0.7593	0.9883	0.3200	0.8915	0.0783	ns	ns
ZT20-21	0.2034	0.0700	0.6126	0.9719	0.3042	0.8387	ns	ns
ZT21-22	0.0373	0.9963	0.0364	0.4777	0.7408	0.2915	ns	ns
ZT22-23	0.2897	0.9932	0.0325	0.9445	0.6610	0.3055	ns	ns
ZT23-24	0.8547	0.6399	0.8373	0.6993	0.5527	0.5578	ns	ns
ZT24-25	0.0827	0.1046	0.7116	0.1276	0.4522	0.6013	ns	ns
ZT25-26	0.0188	0.0101	0.2142	0.8966	0.8637	0.9667	ns	ns
ZT26-27	<0.0001	0.0001	<0.0001	0.9692	0.9879	0.7914	ns	ns
ZT27-28	<0.0001	0.0006	<0.0001	0.7390	0.7811	0.9991	ns	ns
ZT28-29	<0.0001	0.1204	<0.0001	0.2086	0.4445	0.1619	ns	ns

	Data	DFn, DFd	Group		Time		Interaction	
			F	p	F	p	F	p
	Total sleep	2, 85	0.8538	0.4294	145.1	<0.0001	2.800	<0.0001

Fig. 5B	Sleep episodes	2, 85	10.55	<0.0001	16.12	<0.0001	1.593	<0.0001
	P(wake)	2, 85	0.1322	0.8764	122.3	<0.0001	3.910	<0.0001

Dunnett's multiple comparisons

	R58E02/shi ^{ts1} vs R58E02/+			R58E02/shi ^{ts1} vs shi ^{ts1} /+			Summary		
	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	0.8005	0.2826	0.0435	0.4019	0.8339	0.0771	ns	ns	ns
ZT1-2	0.9382	0.1464	0.0793	0.1645	0.4917	0.1169	ns	ns	ns
ZT2-3	0.1552	0.0021	0.3853	0.7564	0.1270	0.7221	ns	ns	ns
ZT3-4	0.3085	0.1483	0.1580	0.3739	0.5286	0.5679	ns	ns	ns
ZT4-5	0.0856	0.4209	0.1641	0.0247	0.7966	0.0538	ns	ns	ns
ZT5-6	0.7124	0.6537	0.2077	0.2381	0.7568	0.0337	ns	ns	ns
ZT6-7	0.2565	0.4993	0.8119	0.0179	0.9113	0.1739	ns	ns	ns
ZT7-8	0.9895	0.9558	0.2751	0.7794	0.1494	0.0590	ns	ns	ns
ZT8-9	0.9689	0.9665	0.9934	0.9968	0.9880	0.9565	ns	ns	ns
ZT9-10	0.0042	>0.9999	0.609	0.4358	0.8578	0.7616	ns	ns	ns
ZT10-11	0.0331	0.5824	0.0017	0.3377	0.1917	0.5663	ns	ns	ns
ZT11-12	0.9911	0.0647	0.5694	0.3057	0.7984	0.0155	ns	ns	ns
ZT12-13	0.2987	0.9709	0.7210	0.2382	0.6114	0.1945	ns	ns	ns
ZT13-14	0.5461	0.8163	0.6356	0.3262	0.2385	0.9144	ns	ns	ns
ZT14-15	0.4584	0.8238	0.3040	0.2050	0.0029	0.4159	ns	ns	ns
ZT15-16	0.6002	0.9381	0.7440	0.1588	0.0311	0.3794	ns	ns	ns
ZT16-17	0.8609	0.4353	0.3110	0.0467	0.0002	0.0432	ns	ns	ns
ZT17-18	0.3560	0.2718	0.3548	0.0095	0.0114	0.0272	ns	ns	ns
ZT18-19	0.9652	0.3089	0.2594	0.0750	0.0064	0.0130	ns	ns	ns
ZT19-20	0.6333	0.8799	0.6772	0.4020	0.1600	0.1175	ns	ns	ns
ZT20-21	0.5231	0.8895	0.5613	0.3095	0.1607	0.9982	ns	ns	ns
ZT21-22	0.0171	0.9988	0.1173	0.4731	0.0465	0.3027	ns	ns	ns
ZT22-23	0.1985	0.6118	0.0365	0.2963	0.1331	0.8238	ns	ns	ns
ZT23-24	0.9784	0.3963	0.8772	0.4226	0.0608	0.3506	ns	ns	ns
ZT24-25	0.3422	0.7435	0.8284	0.1850	0.1291	0.5364	ns	ns	ns
ZT25-26	0.7121	0.9965	0.8877	0.0971	0.0168	0.0378	ns	ns	ns
ZT26-27	0.1224	0.4326	0.6606	0.1271	0.9026	0.2283	ns	ns	ns
ZT27-28	0.6677	0.0765	0.6609	0.9972	0.1588	0.9780	ns	ns	ns
ZT28-29	0.1900	0.2959	0.2459	0.9980	0.9821	0.7576	ns	ns	ns
ZT29-30	0.8075	0.2680	0.3006	0.9481	0.5323	0.9075	ns	ns	ns
ZT30-31	0.2392	0.2211	0.2012	0.9997	0.9988	0.9419	ns	ns	ns

	Data	DFn, DFd	Group		Time		Interaction	
			F	p	F	p	F	p
Fig. 5C	Total sleep	2, 109	40.01	<0.0001	305.9	<0.0001	12.03	<0.0001
	Sleep episodes	2, 109	17.56	<0.0001	27.15	<0.0001	5.9780	<0.0001
	P(wake)	2, 109	32.74	<0.0001	252.9	<0.0001	14.91	<0.0001

Dunnett's multiple comparisons

	c316/shi ^{ts1} vs c316/+			c316/shi ^{ts1} vs shi ^{ts1} /+			Summary		
	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	0.2363	0.0786	0.1531	0.0893	0.0645	0.0042	ns	ns	ns
ZT1-2	0.0073	0.0160	0.0121	0.6278	0.4555	0.0622	ns	ns	ns
ZT2-3	0.0030	0.0012	0.0001	0.8066	0.8262	0.6792	ns	ns	ns
ZT3-4	0.0025	0.0049	<0.0001	0.0003	0.0889	0.0111	**	ns	*
ZT4-5	0.0068	0.2228	<0.0001	<0.0001	0.0416	<0.0001	**	ns	****
ZT5-6	0.0059	0.2774	0.0203	0.0015	0.0047	0.0003	**	ns	*
ZT6-7	0.0004	0.1944	<0.0001	0.1674	0.9849	0.1763	ns	ns	ns
ZT7-8	0.6153	0.5574	0.0191	0.9404	0.9968	0.1813	ns	ns	ns
ZT8-9	0.0221	0.4296	0.4767	0.0083	0.0001	0.2909	*	ns	ns
ZT9-10	0.1397	0.1204	0.0040	<0.0001	<0.0001	<0.0001	ns	ns	**
ZT10-11	0.0312	0.0256	0.0018	0.0004	0.0200	<0.0001	*	*	**
ZT11-12	0.6914	0.7137	0.0019	0.9579	0.9744	0.0140	ns	ns	*
ZT12-13	0.0187	0.1381	0.4596	<0.0001	0.0398	0.0417	*	ns	ns
ZT13-14	0.0414	0.3252	0.0279	<0.0001	0.0304	<0.0001	*	ns	*
ZT14-15	0.7500	0.1517	0.2397	<0.0001	0.0004	0.0010	ns	ns	ns
ZT15-16	0.7791	0.7682	0.9804	0.0004	0.0156	0.0017	ns	ns	ns
ZT16-17	0.4514	0.3751	0.6402	<0.0001	<0.0001	0.0002	ns	ns	ns
ZT17-18	0.0528	0.1956	0.1104	<0.0001	0.0012	<0.0001	ns	ns	ns
ZT18-19	0.1888	0.0408	0.5773	0.0016	0.0019	0.0029	ns	*	ns
ZT19-20	0.5402	0.5251	0.2536	0.0100	0.0078	0.0151	ns	ns	ns

ZT20-21	0.2873	0.1806	0.9350	0.1306	0.1345	0.0418	ns	ns	ns
ZT21-22	0.6358	0.4027	0.2554	0.0108	0.1027	0.0351	ns	ns	ns
ZT22-23	0.1032	0.1278	0.6022	0.0018	0.0143	0.0180	ns	ns	ns
ZT23-24	0.0353	0.1643	0.3655	0.0212	0.1027	0.0361	*	ns	ns
ZT24-25	0.1111	0.0691	0.0423	0.1887	0.2912	0.0167	ns	ns	*
ZT25-26	0.0023	0.0008	0.0002	0.0213	0.0116	0.0066	*	*	**
ZT26-27	0.0037	0.0059	0.0003	>0.9999	0.9432	0.0291	ns	ns	*
ZT27-28	0.0028	0.0587	<0.0001	0.0008	0.3171	0.1213	**	ns	ns
ZT28-29	0.0002	0.0093	<0.0001	0.0105	0.8054	0.0022	*	ns	ns

			Group		Time		Interaction		
Data			DFn, DFd	F	p	F	p	F	p
Fig. 5D	Total sleep		2, 120	10.69	<0.0001	366.0	<0.0001	3.9710	<0.0001
	Sleep episodes		2, 120	1.6140	0.2034	32.36	<0.0001	2.8770	<0.0001
	P(wake)		2, 108	9.6600	0.0001	275.7	<0.0001	2.8450	<0.0001
Dunnett's multiple comparisons									
c316/dTrpA1 vs c316/+			c316/dTrpA1 vs dTrpA1/+				Summary		
	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	0.3626	0.0391	0.8978	0.9918	>0.9999	0.0111	ns	ns	ns
ZT1-2	0.9545	0.9799	0.9973	0.5452	0.6784	0.1896	ns	ns	ns
ZT2-3	0.9474	0.9727	0.0966	0.4805	0.6537	0.9961	ns	ns	ns
ZT3-4	0.9316	0.8585	0.9857	0.1698	0.9464	0.0398	ns	ns	ns
ZT4-5	0.4767	0.9982	0.9864	0.0028	0.3100	0.0016	ns	ns	ns
ZT5-6	0.2708	0.6247	0.8270	0.0008	0.4900	0.0022	ns	ns	ns
ZT6-7	0.4385	0.9366	0.7885	<0.0001	0.9876	0.0631	ns	ns	ns
ZT7-8	0.0021	0.0587	0.0113	0.0257	0.0587	0.077	*	ns	ns
ZT8-9	0.5146	0.4169	0.8064	0.2170	0.5753	0.3378	ns	ns	ns
ZT9-10	0.0518	0.0213	0.0871	0.7524	0.9972	0.8517	ns	ns	ns
ZT10-11	0.0626	0.0877	0.0092	0.7672	0.7835	0.9346	ns	ns	ns
ZT11-12	0.0121	0.1292	0.7628	0.9415	0.7839	0.2535	ns	ns	ns
ZT12-13	0.0125	0.0010	0.0116	0.0118	0.0097	0.0027	*	**	*
ZT13-14	0.1297	0.3798	0.2562	<0.0001	0.2680	0.0246	ns	ns	ns
ZT14-15	0.9200	0.9719	0.1479	<0.0001	0.0002	0.0124	ns	ns	ns
ZT15-16	0.7227	0.6478	0.0932	0.0046	0.0021	0.9846	ns	ns	ns
ZT16-17	0.9513	0.2125	0.3510	0.0581	0.0258	0.9999	ns	ns	ns
ZT17-18	0.4718	0.2965	0.1772	0.9854	0.3905	0.8107	ns	ns	ns
ZT18-19	0.4065	0.9803	0.1455	0.5511	0.0580	0.6864	ns	ns	ns
ZT19-20	0.2573	0.1721	0.8705	0.6872	0.3212	0.6427	ns	ns	ns
ZT20-21	0.9307	0.9430	0.8212	0.9755	0.5198	0.8757	ns	ns	ns
ZT21-22	0.9996	0.8567	0.9889	0.9853	0.8890	0.9376	ns	ns	ns
ZT22-23	0.6563	0.7556	0.8949	0.9631	0.9708	0.8445	ns	ns	ns
ZT23-24	0.9722	0.8131	0.8383	0.9392	0.9815	0.9057	ns	ns	ns
ZT24-25	0.3406	0.3063	0.2709	0.9494	0.9450	0.0613	ns	ns	ns
ZT25-26	0.8390	0.9893	0.4518	0.4362	0.2941	0.1113	ns	ns	ns
ZT26-27	0.9759	0.8060	0.9634	0.1469	0.1217	0.0861	ns	ns	ns
ZT27-28	0.9128	0.7156	0.5508	0.0284	0.1679	0.001	ns	ns	ns
ZT28-29	0.9916	0.6140	0.9656	0.0003	0.0173	0.0050	ns	ns	ns
ZT29-30	0.2575	0.6352	0.7387	0.0025	0.8587	0.0085	ns	ns	ns
ZT30-31	0.9980	0.7240	0.9954	0.0505	0.4597	0.0175	ns	ns	ns

				Group		Time		Interaction	
Data			DFn, DFd	F	p	F	p	F	p
Fig. 7H	Total sleep		2, 76	8.388	0.0005	169.2	<0.0001	3.7640	<0.0001
	Sleep episodes		2, 76	4.602	0.0130	17.64	<0.0001	2.9960	<0.0001
	P(wake)		2, 76	3.148	0.0486	131.5	<0.0001	2.7130	<0.0001
Dunnett's multiple comparisons									
MB299B/dTrpA1 vs MB299B/+				MB299B/dTrpA1 vs dTrpA1/+				Summary	
	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	0.9008	0.7471	-	0.3210	0.9972	-	ns	ns	-
ZT1-2	0.1209	0.0056	0.0438	0.8648	>0.9999	0.6962	ns	ns	ns
ZT2-3	0.4323	0.2669	0.3740	0.9895	0.9957	0.8727	ns	ns	ns
ZT3-4	0.9515	0.3079	0.8372	0.9240	0.9397	0.9880	ns	ns	ns
ZT4-5	0.0994	0.5627	0.9481	0.0015	0.3609	0.9998	ns	ns	ns
ZT5-6	0.1848	0.5773	0.3472	<0.0001	0.1328	0.0002	ns	ns	ns
ZT6-7	0.0675	0.0338	0.2039	<0.0001	0.0343	<0.0001	ns	*	ns

ZT7-8	0.1650	0.9985	0.6571	0.1190	0.2494	<0.0001	ns	ns	ns
ZT8-9	0.1921	0.3105	0.9855	0.0015	0.1149	0.0515	ns	ns	ns
ZT9-10	0.4766	0.1086	0.6598	0.8071	0.9734	0.9204	ns	ns	ns
ZT10-11	0.9234	0.8170	0.8971	0.4374	0.1497	0.9152	ns	ns	ns
ZT11-12	0.7611	0.9832	0.8104	0.4730	0.3304	0.6678	ns	ns	ns
ZT12-13	0.4141	0.3131	0.3499	0.9966	0.5251	0.9479	ns	ns	ns
ZT13-14	0.1063	0.1120	0.2001	0.0129	0.0788	0.0673	ns	ns	ns
ZT14-15	0.8599	0.3156	0.3850	0.0029	0.0075	0.0057	ns	ns	ns
ZT15-16	0.9441	0.0110	0.9094	0.0010	0.0010	0.0083	ns	*	ns
ZT16-17	0.6404	0.0068	0.7756	0.0020	0.0001	0.0075	ns	**	ns
ZT17-18	0.0416	0.0037	0.0687	0.0002	<0.0001	<0.0001	*	**	ns
ZT18-19	0.0226	0.6235	0.4094	0.0004	0.0149	0.0097	*	ns	ns
ZT19-20	0.0010	0.0007	0.0055	0.0008	<0.0001	0.0009	***	***	**
ZT20-21	0.0016	0.0003	0.0020	0.0458	<0.0001	0.0098	*	***	**
ZT21-22	0.0097	0.0198	0.0025	0.0188	0.0016	0.0356	*	*	*
ZT22-23	0.0584	0.0050	0.0526	0.0412	0.0375	0.1694	ns	*	ns
ZT23-24	0.1141	0.7781	0.3733	0.1519	0.1133	0.1542	ns	ns	ns
ZT24-25	0.6262	0.8891	0.9961	0.7042	0.9609	0.5279	ns	ns	ns
ZT25-26	0.5513	0.8899	0.6711	0.4102	0.3740	0.9370	ns	ns	ns
ZT26-27	0.7146	0.9669	0.9096	0.7726	0.7684	0.9991	ns	ns	ns
ZT27-28	0.2084	0.2886	0.1680	0.9489	0.4794	0.9659	ns	ns	ns
ZT28-29	0.1365	0.3233	0.5605	0.4382	0.8724	0.9521	ns	ns	ns
ZT29-30	0.8415	0.9937	0.4147	0.1906	0.9938	0.3155	ns	ns	ns
ZT30-31	0.4714	0.8791	0.7649	0.0561	0.9025	0.4026	ns	ns	ns

	Data	DFn, DFd	Group		Time		Interaction	
			F	p	F	p	F	p
Fig. 7f	Total sleep	2, 103	2.4680	0.0897	294.4	<0.0001	9.8710	<0.0001
	Sleep episodes	2, 103	8.9860	0.0003	19.13	<0.0001	3.5190	<0.0001
	P(wake)	2, 103	1.3280	0.2696	213.7	<0.0001	9.2830	<0.0001

Dunnett's multiple comparisons									
MB299B/shi ^{ts1} vs MB299B/+			MB299B/shi ^{ts1} vs shi ^{ts1} /+			Summary			
Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	
ZT0-1	0.5453	0.9967	0.9595	0.0046	0.1744	0.0008	ns	ns	ns
ZT1-2	0.9548	0.9576	0.9559	0.4535	0.2436	0.0031	ns	ns	ns
ZT2-3	0.8636	0.9626	0.0245	0.9724	0.9883	0.6837	ns	ns	ns
ZT3-4	0.8184	0.9767	0.3053	0.8970	0.9319	0.7827	ns	ns	ns
ZT4-5	0.8556	0.7185	0.8448	0.4840	0.9298	0.8280	ns	ns	ns
ZT5-6	0.9404	0.9690	0.3321	0.0234	0.0760	0.0603	ns	ns	ns
ZT6-7	0.1678	0.3358	0.3128	<0.0001	0.0021	0.0216	ns	ns	ns
ZT7-8	0.0003	<0.0001	0.3743	0.9471	0.3120	0.0008	ns	ns	ns
ZT8-9	<0.0001	0.9511	<0.0001	0.4955	0.6085	0.4937	ns	ns	ns
ZT9-10	>0.9999	>0.9999	0.4020	<0.0001	0.1663	0.0455	ns	ns	ns
ZT10-11	0.0709	0.1667	0.3092	0.5090	0.0922	<0.0001	ns	ns	ns
ZT11-12	0.7331	>0.9999	0.8686	0.5517	0.1070	0.0468	ns	ns	ns
ZT12-13	0.5493	0.3579	0.0802	0.0011	0.0111	0.1171	ns	ns	ns
ZT13-14	0.6080	0.0061	0.3821	0.0269	0.9540	0.0093	ns	ns	ns
ZT14-15	0.3373	0.0355	0.3100	0.8050	0.3550	0.4580	ns	ns	ns
ZT15-16	0.3016	0.0022	0.0626	0.9605	0.9818	0.8952	ns	ns	ns
ZT16-17	0.0910	0.0106	0.0879	0.9966	0.3719	0.8301	ns	ns	ns
ZT17-18	0.0504	0.0047	0.0209	0.9989	0.7792	0.3368	ns	ns	ns
ZT18-19	0.0113	0.0060	0.0317	0.3184	0.4735	0.4365	ns	ns	ns
ZT19-20	0.0149	0.0032	0.0095	0.2424	>0.9999	0.1001	ns	ns	ns
ZT20-21	0.2533	0.0386	0.0144	0.2765	0.7969	0.1505	ns	ns	ns
ZT21-22	0.2597	0.3544	0.1959	0.9943	0.8940	0.9809	ns	ns	ns
ZT22-23	0.0024	0.0394	0.0985	0.3160	0.6696	0.6003	ns	ns	ns
ZT23-24	0.0170	0.0596	0.0096	0.1281	0.9342	0.0796	ns	ns	ns
ZT24-25	0.8929	0.9648	0.4735	0.0238	0.0136	0.1013	ns	ns	ns
ZT25-26	0.9853	0.9994	0.5683	0.0619	0.0246	0.0002	ns	ns	ns
ZT26-27	0.9853	0.2475	0.8228	0.9812	0.2330	0.0617	ns	ns	ns
ZT27-28	0.9771	0.7857	0.4495	0.2291	0.2123	0.7262	ns	ns	ns
ZT28-29	0.3856	0.9034	0.9803	0.0176	0.2097	0.0461	ns	ns	ns
ZT29-30	0.9851	0.6283	0.9927	<0.0001	0.1686	<0.0001	ns	ns	ns
ZT30-31	0.9122	0.3080	0.9723	<0.0001	<0.0001	<0.0001	ns	ns	ns

	Group	Time	Interaction
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Data			DFn, DFd	F	p	F	p	F	p
Fig. 7J	Total sleep		2, 79	18.94	<0.0001	178.8	<0.0001	8.6940	<0.0001
	Sleep episodes		2, 79	19.82	<0.0001	16.39	<0.0001	3.1660	<0.0001
	P(wake)		2, 78	8.348	0.0005	137	<0.0001	5.6740	<0.0001
Dunnett's multiple comparisons									
MB043B/dTrpA1 vs MB043B/+			MB043B/dTrpA1 vs dTrpA1/+				Summary		
	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	0.0012	0.0129	-	0.4400	0.7524	-	ns	ns	-
ZT1-2	0.0032	0.0029	0.0187	0.0697	0.1516	0.4706	ns	ns	ns
ZT2-3	0.0036	0.0019	0.0383	0.5696	0.8560	0.1921	ns	ns	ns
ZT3-4	0.0023	0.0041	0.0498	0.1846	0.1069	0.5094	ns	ns	ns
ZT4-5	0.8898	0.7974	0.0507	<0.0001	0.9670	0.3653	ns	ns	ns
ZT5-6	0.3382	0.0357	0.5267	<0.0001	0.2234	<0.0001	ns	ns	ns
ZT6-7	0.0015	0.0618	0.0789	<0.0001	0.0620	<0.0001	**	ns	ns
ZT7-8	0.9979	0.3545	0.7467	0.0012	0.3976	<0.0001	ns	ns	ns
ZT8-9	0.0076	0.1832	0.2104	<0.0001	0.9648	0.0025	**	ns	ns
ZT9-10	0.8015	0.0893	0.8603	0.0517	0.3482	0.0090	ns	ns	ns
ZT10-11	0.0008	0.0024	0.1810	0.9587	0.8682	0.7601	ns	ns	ns
ZT11-12	0.0279	0.0354	0.1140	0.7040	0.4804	0.9664	ns	ns	ns
ZT12-13	0.5118	0.7019	0.5201	0.0638	0.4647	0.9425	ns	ns	ns
ZT13-14	0.0491	0.0836	0.0259	0.0020	0.9500	0.0062	*	ns	*
ZT14-15	0.0002	0.0038	0.0213	0.0002	0.0811	0.0093	***	ns	*
ZT15-16	0.0108	0.0147	0.0053	0.0003	0.0083	0.0026	*	*	**
ZT16-17	0.0155	0.0064	0.0830	0.0003	0.0011	0.0108	*	**	ns
ZT17-18	0.0028	<0.0001	0.0059	0.0002	0.0002	0.0002	**	***	**
ZT18-19	0.0007	0.0014	0.0154	0.0002	0.0011	0.0014	***	**	*
ZT19-20	0.0019	0.0019	0.0011	0.0002	0.0016	0.0006	**	**	**
ZT20-21	0.0006	0.0020	0.0034	0.0032	0.0034	0.0063	**	**	**
ZT21-22	0.0005	0.0046	0.0023	0.0019	0.0095	0.0076	**	**	**
ZT22-23	0.0002	0.0008	0.0010	0.0005	0.0298	0.0077	***	*	**
ZT23-24	0.0007	0.0010	0.0019	0.0095	0.0182	0.0051	**	*	**
ZT24-25	0.0112	0.0016	0.0078	0.9656	0.9991	0.0116	ns	ns	*
ZT25-26	0.0065	0.0067	0.0952	0.6850	0.7371	0.5757	ns	ns	ns
ZT26-27	0.0076	0.3405	0.0501	0.0352	0.4913	0.4102	*	ns	ns
ZT27-28	0.0018	0.1981	0.0123	0.0628	0.9391	0.1087	ns	ns	ns
ZT28-29	0.0089	0.4440	0.1439	0.8539	0.7427	0.8064	ns	ns	ns
ZT29-30	0.0633	0.9574	0.0568	0.3596	0.4635	0.8512	ns	ns	ns
ZT30-31	0.4448	0.4818	0.7767	0.7838	0.4160	0.2171	ns	ns	ns

			Group		Time		Interaction		
Data			DFn, DFd	F	p	F	p	F	p
Fig. 7K	Total sleep		2, 100	29.75	<0.0001	214.3	<0.0001	11.17	<0.0001
	Sleep episodes		2, 100	13.18	<0.0001	18.11	<0.0001	5.3760	<0.0001
	P(wake)		2, 101	10.23	<0.0001	166.8	<0.0001	9.9810	<0.0001
Dunnett's multiple comparisons									
MB043B/shi ^{ts1} vs MB043B/+			MB043B/shi ^{ts1} vs shi ^{ts1} /+				Summary		
	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	0.7629	0.8750	0.8152	0.0292	0.3556	0.0004	ns	ns	ns
ZT1-2	0.2073	0.0745	0.9994	0.5546	0.3382	0.0505	ns	ns	ns
ZT2-3	0.3581	0.5553	0.0235	0.4590	0.5238	0.1837	ns	ns	ns
ZT3-4	0.0523	0.0154	0.2194	0.0142	0.0143	0.3313	ns	*	ns
ZT4-5	0.0198	0.1146	0.0303	<0.0001	0.4448	0.0404	*	ns	*
ZT5-6	<0.0001	0.1431	0.0077	<0.0001	0.8487	<0.0001	****	ns	**
ZT6-7	<0.0001	0.0808	<0.0001	<0.0001	0.7751	<0.0001	****	ns	****
ZT7-8	0.9826	0.6338	<0.0001	0.0002	>0.9999	<0.0001	ns	ns	****
ZT8-9	0.1016	0.8709	0.0020	0.0145	0.6063	0.0553	ns	ns	ns
ZT9-10	0.0085	>0.9999	0.6787	<0.0001	0.0324	<0.0001	**	ns	ns
ZT10-11	0.3917	0.5212	0.1024	0.0981	0.5159	<0.0001	ns	ns	ns
ZT11-12	0.1553	0.1340	0.4362	0.3605	0.1312	0.2042	ns	ns	ns
ZT12-13	0.4068	0.4866	0.7569	0.0564	0.0213	0.0500	ns	ns	ns
ZT13-14	0.0387	0.0043	0.9123	0.0605	0.7237	0.9910	ns	ns	ns
ZT14-15	<0.0001	0.0005	0.0007	0.0007	0.3045	0.0307	***	ns	*
ZT15-16	0.0001	<0.0001	<0.0001	<0.0001	0.2105	<0.0001	***	ns	****
ZT16-17	0.0008	<0.0001	<0.0001	0.0001	0.0009	<0.0001	***	***	****
ZT17-18	<0.0001	0.0003	0.0002	<0.0001	0.0161	<0.0001	****	*	***

ZT18-19	0.0011	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	**	****	***
ZT19-20	0.0025	<0.0001	0.0017	<0.0001	0.0126	0.0001	**	*	**
ZT20-21	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	****	****	****
ZT21-22	0.0009	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	***	***	****
ZT22-23	0.0019	<0.0001	0.0002	0.0066	0.0006	0.0003	**	***	***
ZT23-24	0.0002	<0.0001	0.0003	<0.0001	0.0089	0.0002	***	**	***
ZT24-25	0.9226	0.6206	0.1322	0.1509	0.1250	0.0025	ns	ns	ns
ZT25-26	0.4159	0.9544	0.8900	0.0498	0.0208	0.0055	ns	ns	ns
ZT26-27	0.6479	0.9408	0.6301	0.8007	0.5577	0.1041	ns	ns	ns
ZT27-28	0.1835	0.5260	0.2652	0.2042	0.4179	0.9925	ns	ns	ns
ZT28-29	0.0001	0.8840	0.0050	0.1684	0.9925	0.5242	ns	ns	ns
ZT29-30	0.0170	0.9084	0.0048	<0.0001	0.6428	0.0360	ns	ns	*
ZT30-31	0.0221	0.9918	0.0159	<0.0001	0.0201	<0.0001	ns	ns	ns

	Group			Time		Interaction						
	Data	DFn, DFd	F	p	F	p	F	p				
Fig. 9A	Total sleep	3, 149	10.14	<0.0001	129.9	<0.0001	11.29	<0.0001				
	Sleep episodes	3, 149	26.05	<0.0001	4.538	<0.0001	3.516	0.0002				
	P(wake)	3, 149	64.03	<0.0001	72.10	<0.0001	9.350	<0.0001				
Dunnett's multiple comparisons												
VT064246, MB299B/shi ^{ts1} vs shi ^{ts1} /+			MB299B/shi ^{ts1} vs shi ^{ts1} /+			VT064246/shi ^{ts1} vs shi ^{ts1} /+			Summary			
	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	0.0012	0.0822	0.6939	0.4009	0.9999	0.7227	0.9699	0.9982	0.1135	ns	ns	ns
ZT1-2	0.6433	>0.9999	0.9528	0.9985	0.8127	0.9989	0.7121	0.9997	0.9997	ns	ns	ns
ZT2-3	0.0585	0.7961	0.0255	0.3372	0.8271	0.8464	0.0792	0.4275	0.1163	ns	ns	ns
ZT3-4	0.4668	0.1137	>0.9999	0.5251	0.9315	0.9486	0.0362	0.9550	0.4602	ns	ns	ns
ZT4-5	<0.0001	0.0433	<0.0001	<0.0001	0.9898	<0.0001	<0.0001	0.9008	<0.0001	****	ns	****
ZT5-6	0.0962	0.9763	<0.0001	0.9799	0.0140	0.6201	0.0334	>0.9999	0.0002	ns	ns	ns
ZT6-7	0.0001	0.4568	<0.0001	0.7972	0.4453	0.5538	0.0206	0.2832	0.0031	ns	ns	ns
ZT7-8	<0.0001	<0.0001	<0.0001	0.004	0.1856	0.2448	<0.0001	0.0015	0.0009	**	ns	ns
ZT8-9	<0.0001	0.3101	<0.0001	<0.0001	0.9990	<0.0001	<0.0001	0.5269	<0.0001	****	ns	****
ZT9-10	0.8679	0.0001	0.0824	0.1871	0.0037	0.9995	0.5547	0.0090	0.9404	ns	**	ns
ZT10-11	0.0002	<0.0001	<0.0001	0.0005	<0.0001	<0.0001	0.0079	0.0034	<0.0001	**	**	****
ZT11-12	0.0008	<0.0001	<0.0001	0.0026	0.0006	<0.0001	0.0400	0.0169	0.0022	*	*	**
ZT12-13	0.0004	0.9910	<0.0001	<0.0001	0.7508	<0.0001	<0.0001	0.4758	<0.0001	***	ns	****
ZT13-14	<0.0001	0.0002	<0.0001	<0.0001	0.0011	<0.0001	<0.0001	0.0021	<0.0001	****	**	****
ZT14-15	<0.0001	<0.0001	0.0139	<0.0001	<0.0001	0.0003	<0.0001	0.0046	<0.0001	****	**	*
ZT15-16	0.0002	<0.0001	0.0066	0.0002	0.0045	0.0011	<0.0001	0.0161	<0.0001	***	*	**
ZT16-17	<0.0001	<0.0001	0.0459	0.0001	0.0003	0.0153	<0.0001	0.0006	<0.0001	***	***	*
ZT17-18	0.0022	0.0003	0.0495	0.0018	0.0974	0.019	<0.0001	0.2057	<0.0001	**	ns	*
ZT18-19	0.0033	<0.0001	0.0241	0.0020	<0.0001	0.0847	<0.0001	0.0001	<0.0001	**	***	ns
ZT19-20	<0.0001	<0.0001	0.0859	0.0019	0.0003	0.4053	<0.0001	<0.0001	<0.0001	**	***	ns
ZT20-21	0.0016	<0.0001	0.1985	0.0844	0.0276	0.3787	<0.0001	<0.0001	0.0082	ns	*	ns
ZT21-22	0.0106	0.0003	0.6366	0.0897	0.0251	0.4458	<0.0001	<0.0001	0.0116	ns	*	ns
ZT22-23	0.4068	0.0099	0.8556	0.1296	0.1362	0.3387	0.0011	0.0081	0.0084	ns	ns	ns
ZT23-24	0.9757	0.0020	<0.0001	0.2522	0.0193	<0.0001	0.0263	0.0218	<0.0001	ns	*	****
ZT24-25	<0.0001	<0.0001	<0.0001	0.1589	0.0046	<0.0001	0.0047	0.0138	<0.0001	ns	*	****
ZT25-26	<0.0001	<0.0001	<0.0001	0.0778	0.0008	<0.0001	0.0495	0.8653	<0.0001	ns	ns	****
ZT26-27	<0.0001	0.0059	<0.0001	0.0807	0.0037	<0.0001	0.0115	0.4180	0.0002	ns	ns	***
ZT27-28	<0.0001	0.0230	<0.0001	0.0629	0.0066	0.535	0.0111	0.6860	0.6026	ns	ns	ns
ZT28-29	0.0003	0.0188	0.011	0.9546	0.0928	0.724	0.8995	0.7298	>0.9999	ns	ns	ns

	Group			Time		Interaction																																													
	Data	DFn, DFd	F	p	F	p	F	p																																											
Fig. 9B	Total sleep	3, 116	1.191	0.3162	362.6	<0.0001	5.321	<0.0001																																											
	Sleep episodes	3, 116	5.816	0.0010	24.25	<0.0001	2.527	<0.0001																																											
	P(wake)	3, 116	13.07	<0.0001	191.8	<0.0001	5.645	<0.0001																																											
	Dunnett's multiple comparisons																																																		
VT064246, MB299B/shi ^{ts1} vs shi ^{ts1} /+													MB299B/shi ^{ts1} vs shi ^{ts1} /+													VT064246/shi ^{ts1} vs shi ^{ts1} /+													Summary												
	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)																											
ZT0-1	0.0103	0.0017	<0.0001	0.0082	0.0043	<0.0001	0.0522	0.0556	0.0009	ns	ns	***																																							
ZT1-2	0.0118	0.0007	<0.0001	0.0037	0.0006	<0.0001	0.3924	0.3516	0.1495	ns	ns	ns																																							
ZT2-3	0.2496	0.9481	0.4385	0.9134	0.9421	0.7102	0.0055	0.0327	<0.0001	ns	ns	ns																																							

ZT3-4	0.1313	0.9997	0.0053	0.9615	0.6141	0.3147	0.0005	0.8393	<0.0001	ns	ns	ns
ZT4-5	<0.0001	0.7066	<0.0001	<0.0001	0.5016	<0.0001	<0.0001	0.8397	<0.0001	****	ns	****
ZT5-6	0.5137	0.5190	0.2726	0.0048	0.0576	0.9944	0.5146	>0.9999	0.0112	ns	ns	ns
ZT6-7	0.2615	0.2026	0.7645	0.1905	0.0009	0.6368	0.6394	0.1354	0.5593	ns	ns	ns
ZT7-8	0.0123	0.0077	0.1112	0.1023	0.0581	0.1758	0.4824	0.9989	0.5433	ns	ns	ns
ZT8-9	0.7349	0.0093	0.8624	>0.9999	0.6661	0.963	0.1297	0.0084	0.1596	ns	ns	ns
ZT9-10	0.3777	0.1718	0.0706	0.4230	0.1025	0.1385	0.0136	0.0331	0.0006	ns	ns	ns
ZT10-11	0.1639	0.0055	0.2396	0.4143	0.0769	0.3056	0.1275	0.0316	0.0731	ns	ns	ns
ZT11-12	0.0035	0.0013	<0.0001	0.0051	0.0085	<0.0001	0.1701	0.1295	0.0001	ns	ns	***
ZT12-13	0.9002	0.9165	0.8841	0.2025	0.1386	0.0027	0.9968	0.1032	0.6822	ns	ns	ns
ZT13-14	0.3590	0.0660	0.4135	0.0027	0.0305	0.0062	0.0162	0.0035	0.1486	ns	ns	ns
ZT14-15	0.3260	0.1938	0.7823	0.0125	0.0062	0.437	0.2132	0.1447	0.7811	ns	ns	ns
ZT15-16	0.0681	0.1197	0.6239	0.0057	0.0677	0.5947	0.0302	0.0703	0.8581	ns	ns	ns
ZT16-17	0.3349	0.8176	0.9227	0.1069	0.0465	0.763	0.4191	0.1614	0.9277	ns	ns	ns
ZT17-18	0.7686	0.8747	0.9730	0.3623	0.0955	0.8591	0.7458	0.4303	0.9661	ns	ns	ns
ZT18-19	0.2418	0.3409	0.8494	0.0706	0.0501	0.9412	0.1038	0.3003	0.6700	ns	ns	ns
ZT19-20	0.1315	0.9081	0.8608	0.1567	0.6220	0.9717	0.1203	0.9979	0.9467	ns	ns	ns
ZT20-21	0.2492	0.7762	0.9562	0.9919	0.3888	>0.9999	0.6921	0.9825	>0.9999	ns	ns	ns
ZT21-22	0.4072	0.9972	0.7979	0.8373	0.9045	>0.9999	0.9271	0.7844	0.9960	ns	ns	ns
ZT22-23	0.9986	0.5470	0.9999	0.8669	0.9988	0.9958	0.8884	0.9867	0.9966	ns	ns	ns
ZT23-24	<0.0001	0.0252	0.3332	0.0073	0.9617	0.6343	<0.0001	0.9089	0.4822	**	ns	ns
ZT24-25	0.0004	<0.0001	<0.0001	0.0002	0.0006	<0.0001	0.0147	0.0716	0.0035	*	ns	**
ZT25-26	0.0239	0.0014	<0.0001	0.0025	<0.0001	<0.0001	0.6768	0.0498	0.1390	ns	*	ns
ZT26-27	0.9932	0.1633	0.7489	0.2377	0.0081	0.2974	0.3914	0.7054	0.0420	ns	ns	ns
ZT27-28	0.0007	0.9996	0.0018	0.3792	0.3802	0.3490	0.0005	0.5244	<0.0001	ns	ns	ns
ZT28-29	0.0041	0.8965	0.0254	0.0534	0.4718	0.2205	<0.0001	0.9933	<0.0001	ns	ns	ns

	Group			Time			Interaction		
	Data	DFn, DFd	F	p	F	p	F	p	
Fig. 9C	Total sleep	2, 121	5.4550	0.0054	163.3	<0.0001	4.773	<0.0001	
	Sleep episodes	2, 121	46.12	<0.0001	53.63	<0.0001	2.890	<0.0001	
	P(wake)	2, 121	28.78	<0.0001	111.8	<0.0001	4.606	<0.0001	
THIP	Dunnett's multiple comparisons								
	MB299B/dTrpA1 vs MB299B/+			MB299B/dTrpA1 vs dTrpA1/+			Summary		
	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	>0.9999	>0.9999	>0.9999	>0.9999	>0.9999	>0.9999	ns	ns	ns
ZT1-2	<0.0001	0.0007	<0.0001	0.0015	0.0015	<0.0001	**	**	****
ZT2-3	0.0025	0.0020	0.0002	0.9165	0.0001	0.0018	ns	**	**
ZT3-4	0.4794	0.0039	0.4226	0.2734	<0.0001	0.0002	ns	**	ns
ZT4-5	0.1300	0.8895	0.1198	0.9998	0.0203	0.3675	ns	ns	ns
ZT5-6	0.0066	0.0002	0.0003	0.9625	<0.0001	0.8478	ns	***	ns
ZT6-7	0.1271	<0.0001	0.1878	0.9319	0.0007	0.5117	ns	***	ns
ZT7-8	0.0053	0.0196	0.0102	0.1474	0.0003	0.1118	ns	*	ns
ZT8-9	0.8029	0.2057	0.6601	0.0047	<0.0001	0.0051	ns	ns	ns
ZT9-10	0.1210	<0.0001	0.1673	0.7838	<0.0001	0.0794	ns	****	ns
ZT10-11	0.2984	0.4497	0.8538	0.1240	0.0025	0.8052	ns	ns	ns
ZT11-12	0.1363	0.9995	0.986	0.0353	0.7733	0.9802	ns	ns	ns
ZT12-13	0.8437	0.0020	0.9424	0.0054	0.1270	0.0187	ns	ns	ns
ZT13-14	0.9803	0.9990	0.9752	0.2276	0.6382	0.8253	ns	ns	ns
ZT14-15	0.2842	0.6901	0.928	0.5218	0.9982	0.9938	ns	ns	ns
ZT15-16	0.1458	0.5454	0.8994	0.0301	0.1401	0.6789	ns	ns	ns
ZT16-17	0.9067	0.9110	0.9992	0.7096	0.5752	0.8705	ns	ns	ns
ZT17-18	0.8000	0.5803	0.9404	0.9212	>0.9999	0.9924	ns	ns	ns
ZT18-19	0.9836	0.9874	0.9978	0.5325	0.9044	0.9406	ns	ns	ns
ZT19-20	0.7899	0.9843	0.9936	0.6374	0.9273	0.9577	ns	ns	ns
ZT20-21	0.0596	0.5384	0.9297	0.1306	0.4757	0.6704	ns	ns	ns
ZT21-22	0.3002	0.8908	0.8979	0.2139	0.7441	0.8780	ns	ns	ns
ZT22-23	0.9757	0.9758	0.9983	0.8121	0.9554	0.9193	ns	ns	ns
ZT23-24	0.1441	0.6972	0.8504	0.1902	0.9993	0.5056	ns	ns	ns
ZT24-25	<0.0001	0.9833	<0.0001	0.0002	0.8403	<0.0001	***	ns	****
ZT25-26	0.1190	0.7561	0.0314	0.0024	0.9860	<0.0001	ns	ns	*
ZT26-27	0.9528	0.5715	0.5897	0.0185	0.3839	<0.0001	ns	ns	ns
ZT27-28	0.1630	0.0010	0.0131	0.0295	0.0009	<0.0001	ns	***	*
ZT28-29	0.2208	0.7238	0.2136	0.5167	0.1863	0.2903	ns	ns	ns
ZT29-30	0.9525	0.2923	0.8716	0.0403	0.0289	0.0206	ns	ns	ns

ZT30-31	0.7100	0.8909	0.8372	0.0642	0.0258	0.0041	ns	ns	ns
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	Group			Time		Interaction			
	Data	DFn, DFd	F	p	F	p	F	p	
Fig. 9D	Total sleep	2, 120	11.28	<0.0001	187.6	<0.0001	4.921	<0.0001	
	Sleep episodes	2, 120	136.6	<0.0001	24.47	<0.0001	2.663	<0.0001	
	P(wake)	2, 120	68.03	<0.0001	115.5	<0.0001	3.822	<0.0001	
No THIP	Dunnett's multiple comparisons								
	MB299B/dTrpA1 vs MB299B/+			MB299B/dTrpA1 vs dTrpA1/+			Summary		
	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	0.0000	>0.9999	>0.9999	0.0000	>0.9999	>0.9999	ns	ns	ns
ZT1-2	<0.0001	<0.0001	<0.0001	0.3155	0.0098	0.1434	ns	**	ns
ZT2-3	0.3188	0.0621	0.1293	0.9686	0.0345	0.2843	ns	ns	ns
ZT3-4	0.4801	0.1031	0.499	0.5186	0.1391	>0.9999	ns	ns	ns
ZT4-5	0.0058	0.0044	0.0177	0.3284	0.0375	0.9048	ns	*	ns
ZT5-6	0.0052	0.0004	0.0120	0.2461	0.0003	0.3825	ns	***	ns
ZT6-7	0.0349	0.1035	0.0179	0.5165	0.8308	0.3524	ns	ns	ns
ZT7-8	0.3903	0.5888	0.5023	<0.0001	0.1743	<0.0001	ns	ns	ns
ZT8-9	0.0003	0.0939	0.0016	<0.0001	<0.0001	<0.0001	***	ns	**
ZT9-10	0.4517	0.6421	0.6328	0.1320	0.1189	0.1644	ns	ns	ns
ZT10-11	0.5145	0.2046	0.9002	0.9614	0.2560	0.7398	ns	ns	ns
ZT11-12	0.8946	0.8603	0.7208	0.7045	0.7044	0.5085	ns	ns	ns
ZT12-13	0.3118	0.3101	0.0777	0.2076	0.8004	0.0322	ns	ns	ns
ZT13-14	0.0044	0.0002	0.0090	0.0002	0.0005	0.0019	**	***	**
ZT14-15	0.0070	0.0154	0.0187	0.1159	0.4901	0.0699	ns	ns	ns
ZT15-16	0.0894	0.1660	0.2314	0.0439	0.6076	0.1956	ns	ns	ns
ZT16-17	0.2326	0.4380	0.5854	0.1302	0.8774	0.5638	ns	ns	ns
ZT17-18	0.2170	0.7168	0.6225	0.2571	0.8930	0.6692	ns	ns	ns
ZT18-19	0.3937	>0.9999	0.8572	0.8981	0.9924	0.9642	ns	ns	ns
ZT19-20	0.2576	0.6006	0.6305	0.6617	0.9979	0.8228	ns	ns	ns
ZT20-21	0.0276	0.8190	0.2093	0.3351	0.7864	0.5658	ns	ns	ns
ZT21-22	0.3564	0.9404	0.7808	0.9997	0.8333	0.9989	ns	ns	ns
ZT22-23	0.9545	0.7168	0.9888	0.3941	0.4378	0.7727	ns	ns	ns
ZT23-24	0.3011	0.4537	0.8086	0.6479	0.5679	0.9384	ns	ns	ns
ZT24-25	0.6425	0.7526	0.0360	0.1782	0.5018	0.0042	ns	ns	*
ZT25-26	0.0145	0.9453	0.0014	0.0987	0.0664	0.0074	ns	ns	**
ZT26-27	0.0069	0.6050	<0.0001	0.4597	0.0752	0.0924	ns	ns	ns
ZT27-28	0.0110	0.1354	0.0008	0.1130	0.0263	0.0120	ns	ns	*
ZT28-29	0.0002	0.8988	<0.0001	0.0033	0.0454	<0.0001	**	ns	****
ZT29-30	<0.0001	0.5663	<0.0001	0.0004	0.0084	<0.0001	***	ns	****
ZT30-31	<0.0001	0.0666	<0.0001	<0.0001	0.0007	<0.0001	****	ns	****

	Group			Time		Interaction			
	Data	DFn, DFd	F	p	F	p	F	p	
Fig. 11A	Total sleep	2, 86	28.77	<0.0001	75.90	<0.0001	6.104	<0.0001	
	Sleep episodes	2, 86	13.09	<0.0001	5.620	<0.0001	3.299	<0.0001	
	P(wake)	2, 86	33.61	<0.0001	61.77	<0.0001	5.769	<0.0001	
	Dunnett's multiple comparisons								
	MB310C/dTrpA1 vs MB310C/+			MB310C/dTrpA1 vs dTrpA1/+			Summary		
	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	0.9209	0.8212	0.9727	>0.9999	0.9125	0.3328	ns	ns	ns
ZT1-2	0.9739	0.9054	0.8915	0.7835	0.3355	0.6966	ns	ns	ns
ZT2-3	0.9282	0.8102	0.9535	0.7731	0.2023	0.5547	ns	ns	ns
ZT3-4	0.9991	0.7525	0.9885	0.9569	0.5942	0.9750	ns	ns	ns
ZT4-5	0.9772	0.2479	0.8653	0.9943	0.7517	0.9871	ns	ns	ns
ZT5-6	0.2201	0.1629	0.0612	0.0243	0.0002	0.0073	ns	ns	ns
ZT6-7	0.8267	0.1489	0.9766	0.7558	0.951	0.843	ns	ns	ns
ZT7-8	0.9615	0.8731	0.9956	0.0278	0.0037	0.0045	ns	ns	ns
ZT8-9	0.9966	0.7818	0.2757	0.0719	<0.0001	0.0007	ns	ns	ns
ZT9-10	0.9700	0.8157	0.7109	0.0825	0.0001	0.0036	ns	ns	ns
ZT10-11	0.9608	0.7226	0.5655	0.6760	0.2394	0.1232	ns	ns	ns
ZT11-12	>0.9999	0.9985	0.9268	0.6941	0.1747	0.1854	ns	ns	ns
ZT12-13	0.4999	0.4009	0.0879	0.7045	0.5522	0.7301	ns	ns	ns
ZT13-14	0.0144	0.9545	0.0398	0.2463	0.2266	0.2253	ns	ns	ns
ZT14-15	0.2824	0.9829	0.3489	0.1192	0.2082	0.1915	ns	ns	ns

ZT15-16	0.0708	0.4962	0.2753	0.1845	0.3273	0.4015	ns	ns	ns
ZT16-17	0.0443	0.3957	0.1712	0.3006	0.1052	0.5685	ns	ns	ns
ZT17-18	0.2605	0.2765	0.5275	0.1293	0.3194	0.3575	ns	ns	ns
ZT18-19	0.0608	0.4502	0.4503	0.1545	0.0556	0.2011	ns	ns	ns
ZT19-20	0.1506	0.5139	0.7401	0.0511	0.0082	0.1124	ns	ns	ns
ZT20-21	0.2076	0.4447	0.3850	0.1263	0.0309	0.4961	ns	ns	ns
ZT21-22	0.4032	0.5139	0.4121	0.1451	0.2461	0.5181	ns	ns	ns
ZT22-23	0.2872	0.8730	0.4268	0.9456	0.0178	0.8179	ns	ns	ns
ZT23-24	0.4082	0.8873	0.6733	0.5687	0.0393	0.8829	ns	ns	ns
ZT24-25	0.5076	0.8320	0.9224	0.9954	0.7415	0.7698	ns	ns	ns
ZT25-26	0.324	0.1284	0.4005	0.4397	0.5522	0.4096	ns	ns	ns
ZT26-27	0.1700	0.3164	0.3728	0.4213	0.9889	0.5227	ns	ns	ns
ZT27-28	0.1106	0.1572	0.1624	0.6258	0.5215	0.6858	ns	ns	ns
ZT28-29	0.0240	0.3211	0.0181	0.4736	0.5011	0.2201	ns	ns	ns
ZT29-30	0.0164	0.2984	0.0353	0.4617	0.9510	0.2879	ns	ns	ns
ZT30-31	0.0032	0.9220	0.0962	0.4974	0.7618	0.1488	ns	ns	ns

	Data	DFn, DFd	Group		Time		Interaction	
			F	p	F	p	F	p
Fig. 11B	Total sleep	2, 120	30.75	<0.0001	75.57	<0.0001	8.833	<0.0001
	Sleep episodes	2, 120	34.41	<0.0001	8.902	<0.0001	2.992	<0.0001
	P(wake)	2, 120	47.69	<0.0001	73.51	<0.0001	9.187	<0.0001

Dunnett's multiple comparisons

MB310C/shi ^{ts1} vs MB310C/+			MB310C/shi ^{ts1} vs shi ^{ts1} /+			Summary		
Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	0.8249	0.9125	0.6284	0.6978	0.8573	0.1424	ns	ns
ZT1-2	0.9926	0.9731	0.9487	0.8521	0.7287	0.9031	ns	ns
ZT2-3	0.9967	0.1758	0.8049	0.9925	0.7195	0.3323	*	ns
ZT3-4	0.6008	0.1189	0.2749	0.7758	0.2411	0.963	ns	ns
ZT4-5	0.7972	0.0041	0.4624	0.1953	0.2762	0.1483	ns	ns
ZT5-6	0.5537	0.4074	0.253	0.6152	0.0177	0.6434	ns	ns
ZT6-7	0.0018	0.8219	0.0022	0.7723	0.2663	0.6300	ns	ns
ZT7-8	0.7803	0.8340	0.9477	0.7120	0.9266	0.8216	ns	ns
ZT8-9	0.2172	0.0012	0.1801	<0.0001	0.0374	<0.0001	ns	*
ZT9-10	0.0408	0.0011	<0.0001	<0.0001	0.0309	<0.0001	*	****
ZT10-11	0.3039	0.0038	0.0014	0.0017	0.0109	<0.0001	ns	*
ZT11-12	0.6036	0.0226	0.0022	0.7658	0.6119	0.7890	ns	ns
ZT12-13	<0.0001	0.0005	<0.0001	0.0001	0.2813	<0.0001	****	ns
ZT13-14	<0.0001	0.7580	<0.0001	<0.0001	0.0634	<0.0001	****	ns
ZT14-15	<0.0001	0.0089	<0.0001	<0.0001	0.1252	<0.0001	****	ns
ZT15-16	<0.0001	0.0214	<0.0001	<0.0001	0.0002	<0.0001	****	*
ZT16-17	<0.0001	0.0136	<0.0001	<0.0001	0.0093	<0.0001	****	*
ZT17-18	<0.0001	0.1862	<0.0001	<0.0001	0.1265	<0.0001	****	ns
ZT18-19	<0.0001	0.0023	<0.0001	<0.0001	0.0044	<0.0001	****	**
ZT19-20	<0.0001	0.0015	<0.0001	<0.0001	<0.0001	<0.0001	****	**
ZT20-21	<0.0001	0.0025	<0.0001	<0.0001	<0.0001	<0.0001	****	**
ZT21-22	0.0025	0.0215	0.008	0.0009	<0.0001	0.0124	**	*
ZT22-23	0.1899	0.0152	0.2984	0.1442	0.0027	0.3396	ns	*
ZT23-24	0.0331	0.0110	0.0879	0.0361	0.0026	0.2144	*	*
ZT24-25	0.9927	0.7842	0.5996	0.8293	0.5952	0.2000	ns	ns
ZT25-26	0.9907	0.5504	0.8577	0.8694	0.9369	0.6275	ns	ns
ZT26-27	0.9713	0.1650	0.7899	0.8366	0.7714	0.6709	ns	ns
ZT27-28	0.9775	0.6379	0.7312	0.6895	0.8043	0.6911	ns	ns
ZT28-29	0.9393	0.8604	0.9958	0.7253	0.4614	0.6374	ns	ns

	Data	DFn, DFd	Group		Time		Interaction	
			F	p	F	p	F	p
Fig. 11C	Total sleep	2, 93	62.96	<0.0001	227.6	<0.0001	4.132	<0.0001
	Sleep episodes	2, 93	32.60	<0.0001	15.14	<0.0001	1.679	<0.0001
	P(wake)	2, 93	79.54	<0.0001	187.9	<0.0001	4.915	<0.0001

Dunnett's multiple comparisons

MB310C/dTrpA1 vs MB310C/+			MB310C/dTrpA1 vs dTrpA1/+			Summary		
Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	0.3981	0.7024	0.5048	0.0008	0.0020	<0.0001	ns	ns
ZT1-2	0.4935	0.9603	0.0265	<0.0001	0.0030	<0.0001	ns	*

ZT2-3	0.0195	0.2692	0.0164	<0.0001	0.0473	<0.0001	*	ns	*
ZT3-4	0.1281	0.2693	0.0536	0.9248	0.0064	0.9872	ns	ns	ns
ZT4-5	0.0006	0.9603	0.0118	0.7230	0.7803	0.9252	ns	ns	ns
ZT5-6	0.8092	0.3274	0.7552	0.8155	0.7803	0.9717	ns	ns	ns
ZT6-7	0.8855	0.0256	0.7206	0.5477	0.1750	0.5827	ns	ns	ns
ZT7-8	0.0159	0.0631	<0.0001	0.7433	0.9133	0.9996	ns	ns	ns
ZT8-9	0.0212	0.0831	<0.0001	0.6106	0.8520	0.9039	ns	ns	ns
ZT9-10	0.1337	0.1384	0.0005	0.5963	0.3926	0.1859	ns	ns	ns
ZT10-11	0.4672	0.1079	0.0279	0.7160	0.9603	0.4684	ns	ns	ns
ZT11-12	0.6810	0.6214	0.4731	0.9636	>0.9999	0.8818	ns	ns	ns
ZT12-13	0.2161	0.9603	0.1588	0.6810	0.0631	0.9781	ns	ns	ns
ZT13-14	0.0007	0.6214	0.0206	0.1254	>0.9999	0.2154	ns	ns	ns
ZT14-15	0.0141	0.2692	0.1063	0.0009	0.0064	0.0402	*	ns	ns
ZT15-16	0.0305	0.4644	0.2660	0.0133	0.4644	0.2675	*	ns	ns
ZT16-17	0.3516	0.9603	0.7082	0.5339	0.9133	0.8570	ns	ns	ns
ZT17-18	0.5068	0.9603	0.7770	0.9727	0.9899	>0.9999	ns	ns	ns
ZT18-19	0.9727	0.4644	0.9797	0.9923	0.7024	0.9855	ns	ns	ns
ZT19-20	0.7365	0.8520	0.9385	0.9667	0.9603	0.9858	ns	ns	ns
ZT20-21	0.4351	0.1750	0.7562	0.6317	0.6214	0.7603	ns	ns	ns
ZT21-22	0.9938	0.0631	0.9469	0.9568	0.8520	0.9959	ns	ns	ns
ZT22-23	0.7020	0.5413	0.8929	0.4164	>0.9999	0.8509	ns	ns	ns
ZT23-24	0.8092	0.7024	0.9290	0.9495	0.7803	0.9978	ns	ns	ns
ZT24-25	0.0055	0.0043	<0.0001	<0.0001	<0.0001	<0.0001	**	**	****
ZT25-26	0.0005	0.7025	0.0004	<0.0001	0.0001	<0.0001	***	ns	***
ZT26-27	0.6388	0.3925	0.4132	<0.0001	0.2184	<0.0001	ns	ns	ns
ZT27-28	0.0039	0.6214	0.0789	0.0060	0.0256	0.009	**	ns	ns
ZT28-29	0.0035	0.7022	0.0077	0.9418	0.7025	0.9923	ns	ns	ns
ZT29-30	0.0003	0.2186	0.0061	0.0297	0.6214	0.1137	*	ns	ns
ZT30-31	<0.0001	>0.9999	0.0011	0.0028	0.9899	0.0090	**	ns	**

		Group		Time		Interaction			
Data		DFn, DFd	F	p	F	p	F	p	
Fig. 11D	Total sleep	2, 124	394.4	<0.0001	249.6	<0.0001	7.587	<0.0001	
	Sleep episodes	2, 124	54.30	<0.0001	21.67	<0.0001	3.888	<0.0001	
	P(wake)	2, 124	315.5	<0.0001	246.7	<0.0001	9.371	<0.0001	
Dunnett's multiple comparisons									
MB310C/shi ^{ts1} vs MB310C/+			MB310C/shi ^{ts1} vs shi ^{ts1} /+			Summary			
	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	<0.0001	0.1314	<0.0001	0.4594	0.3620	<0.0001	ns	ns	****
ZT1-2	<0.0001	0.9305	<0.0001	0.6375	0.3515	0.0138	ns	ns	*
ZT2-3	<0.0001	0.9919	<0.0001	0.1509	0.3771	0.6089	ns	ns	ns
ZT3-4	<0.0001	0.4696	<0.0001	<0.0001	0.8699	<0.0001	****	ns	****
ZT4-5	<0.0001	0.0003	<0.0001	<0.0001	0.0879	0.0003	****	ns	***
ZT5-6	0.0919	<0.0001	0.3379	0.0002	0.0170	0.2468	ns	*	ns
ZT6-7	0.1917	0.9919	0.4836	0.1244	0.8319	0.3470	ns	ns	ns
ZT7-8	0.0365	0.1050	0.2912	0.4234	0.0889	0.7433	ns	ns	ns
ZT8-9	<0.0001	0.0502	<0.0001	<0.0001	0.0018	<0.0001	****	ns	****
ZT9-10	<0.0001	0.0119	<0.0001	<0.0001	0.0039	<0.0001	****	*	****
ZT10-11	<0.0001	0.2420	<0.0001	0.0050	0.3356	<0.0001	**	ns	****
ZT11-12	<0.0001	0.1995	<0.0001	0.8301	0.6909	0.4675	ns	ns	ns
ZT12-13	<0.0001	0.6102	<0.0001	<0.0001	0.2493	<0.0001	****	ns	****
ZT13-14	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	0.0001	****	****	***
ZT14-15	<0.0001	<0.0001	0.0112	<0.0001	<0.0001	0.002	****	****	*
ZT15-16	0.0006	0.0031	0.0577	0.0007	0.0002	0.0524	****	**	ns
ZT16-17	<0.0001	0.0062	0.0217	<0.0001	0.0053	0.0265	****	**	*
ZT17-18	0.0198	0.0086	0.2010	0.0163	0.0039	0.1824	*	**	ns
ZT18-19	0.0062	0.0007	0.0936	0.0037	0.0011	0.0909	**	**	ns
ZT19-20	0.4957	0.2903	0.8552	0.3081	0.0185	0.7265	ns	ns	ns
ZT20-21	0.3988	0.1314	0.7413	0.3662	0.0469	0.6987	ns	ns	ns
ZT21-22	0.9763	0.8202	0.9925	0.9581	0.9219	0.9977	ns	ns	ns
ZT22-23	0.6599	0.3446	0.8807	0.7810	0.9491	0.9537	ns	ns	ns
ZT23-24	0.9980	0.9683	0.9986	>0.9999	>0.9999	0.9980	ns	ns	ns
ZT24-25	<0.0001	0.4046	<0.0001	0.8635	0.7294	0.0451	ns	ns	*
ZT25-26	<0.0001	0.0022	<0.0001	0.0491	0.4102	0.3330	*	ns	ns
ZT26-27	<0.0001	0.9683	<0.0001	<0.0001	0.0576	0.0013	****	ns	**
ZT27-28	<0.0001	0.0829	<0.0001	<0.0001	0.8104	<0.0001	****	ns	****

ZT28-29	<0.0001	0.0022	<0.0001	<0.0001	0.4197	<0.0001	****	ns	****
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Figure S1A	Group			Time			Interaction		
	Data	DFn, DFd	F	p	F	p	F	p	
	Total sleep	2, 122	3.663	0.0285	542. 2	<0.0001	4.285	<0.0001	
	Sleep episodes	2, 122	3.395	0.0367	25. 91	<0.0001	2.238	<0.0001	
	P(wake)	2, 109	8.903	0.0003	270. 2	<0.0001	3.895	<0.0001	
	c316/dTrpA1 vs c316/+		c316/dTrpA1 vs dTrpA1/+			Summary			
	Total sleep	Episodes	P(wake)	Total sleep	Episodes	P(wake)	Total sleep	Episodes	P(wake)
ZT0-1	-	-	0.2729	-	-	0.9731	-	-	ns
ZT1-2	0.0416	0.0449	0.0251	0.9944	0.7676	0.8389	ns	ns	ns
ZT2-3	0.0238	0.0079	0.0661	0.6571	0.6346	0.9494	ns	ns	ns
ZT3-4	0.9595	0.8212	0.7928	0.9883	0.9244	0.7709	ns	ns	ns
ZT4-5	0.6517	0.2818	0.6146	0.7396	0.9968	0.1197	ns	ns	ns
ZT5-6	0.4275	0.9773	0.9887	0.0490	0.7132	0.0131	ns	ns	ns
ZT6-7	0.2991	0.4860	0.7434	0.0009	0.7980	0.9988	ns	ns	ns
ZT7-8	0.0009	0.6351	0.2941	<0.0001	0.1021	0.0313	***	ns	ns
ZT8-9	0.3708	0.8332	0.9429	0.9635	0.0576	0.1104	ns	ns	ns
ZT9-10	0.9755	0.0910	0.3739	0.0975	0.3645	0.0268	ns	ns	ns
ZT10-11	0.3291	0.0958	0.0237	0.1601	0.4534	0.1541	ns	ns	ns
ZT11-12	0.7080	0.3258	0.7644	0.0099	0.0085	0.0033	ns	ns	ns
ZT12-13	0.6876	0.7817	0.0611	0.0070	0.3628	<0.0001	ns	ns	ns
ZT13-14	0.0471	0.2383	0.264	<0.0001	0.0007	0.0115	*	ns	ns
ZT14-15	0.0525	0.1282	0.0689	0.0241	0.0020	0.0302	ns	ns	ns
ZT15-16	0.1835	0.9479	0.0906	0.1267	0.3157	0.1077	ns	ns	ns
ZT16-17	0.0482	0.2292	0.2923	0.6146	0.0307	0.3538	ns	ns	ns
ZT17-18	0.6288	0.8345	0.8326	0.7372	0.7873	0.5124	ns	ns	ns
ZT18-19	0.7262	0.9503	0.2319	0.8776	0.9609	0.7318	ns	ns	ns
ZT19-20	0.0933	0.1098	0.5267	0.8844	0.9567	0.5553	ns	ns	ns
ZT20-21	0.4664	0.7729	0.2610	0.9652	>0.9999	0.3811	ns	ns	ns
ZT21-22	0.0684	0.2100	0.0467	0.3909	0.0835	0.4988	ns	ns	ns
ZT22-23	0.1829	0.2046	0.2136	0.1383	0.1650	0.0132	ns	ns	ns
ZT23-24	0.2747	0.5565	0.4119	0.0209	0.3919	0.0067	ns	ns	ns
ZT24-25	0.1774	0.0525	0.0154	0.9825	0.8761	0.4027	ns	ns	ns
ZT25-26	0.2638	0.2641	0.0279	0.5260	0.3123	0.5431	ns	ns	ns
ZT26-27	0.9986	0.9976	0.2889	0.1335	0.1367	0.7433	ns	ns	ns
ZT27-28	0.9416	0.9997	0.3050	0.8498	0.7472	0.6701	ns	ns	ns
ZT28-29	0.6998	0.4309	0.0702	0.5270	0.5210	0.5182	ns	ns	ns
ZT29-30	0.2991	0.2914	0.0647	0.3147	0.8440	0.1195	ns	ns	ns
ZT30-31	0.3330	0.7330	0.1081	0.0336	0.8739	0.3067	ns	ns	ns

Figure S2A				Group	Time		Interaction		
	Data	DFn, DFd		F	p	F	p	F	p
	Total sleep	2, 83		12.16	<0.0001	180.6	<0.0001	4.2060	<0.0001
	Sleep episodes	2, 83		10.90	<0.0001	15.79	<0.0001	2.8380	<0.0001
	P(wake)	2, 84		20.33	<0.0001	158.3	<0.0001	4.5350	<0.0001
	Dunnett's multiple comparisons								
	MB299B/dTrpA1 vs MB299B/+			MB299B/dTrpA1 vs dTrpA1/+			Summary		
	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	0.9271	0.8150	0.9569	0.0025	0.0032	0.2554	ns	ns	ns
ZT1-2	0.0380	0.0005	0.5383	0.3502	0.3906	0.0436	ns	ns	ns
ZT2-3	0.0345	0.3404	0.0151	0.6377	0.4221	0.1726	ns	ns	ns
ZT3-4	<0.0001	0.0091	0.0008	0.4268	0.2148	0.5099	ns	ns	ns
ZT4-5	0.0026	0.1054	0.0008	0.2269	0.4578	0.5939	ns	ns	ns
ZT5-6	<0.0001	0.8922	<0.0001	0.0062	0.6089	0.0024	**	ns	**
ZT6-7	<0.0001	0.5051	<0.0001	0.0188	0.5812	0.2621	*	ns	ns
ZT7-8	0.6767	0.9945	0.0488	0.0081	0.7022	0.0039	ns	ns	*
ZT8-9	0.0005	0.0533	0.0046	0.1411	0.9933	0.1829	ns	ns	ns
ZT9-10	0.3437	0.5029	0.0261	0.2293	0.0146	0.1745	ns	ns	ns
ZT10-11	0.5884	0.3553	0.3099	0.0125	0.1773	0.0407	ns	ns	ns
ZT11-12	0.0227	0.0746	0.0095	0.1394	0.2117	0.0179	ns	ns	ns
ZT12-13	0.4153	0.4524	0.0143	0.0007	0.9532	0.0985	ns	ns	ns
ZT13-14	0.8556	0.8430	0.7427	0.0148	0.8993	0.0020	ns	ns	ns
ZT14-15	0.5386	0.6505	0.7164	0.0193	0.0172	0.0207	ns	ns	ns
ZT15-16	0.6468	0.0463	0.7030	0.0118	0.0470	0.0025	ns	*	ns

ZT16-17	0.3764	0.4060	0.1597	0.0034	0.0234	0.0109	ns	ns	ns
ZT17-18	0.9319	0.6260	0.7423	0.2286	0.9402	0.0132	ns	ns	ns
ZT18-19	0.8229	0.9259	0.9782	0.5236	0.3345	0.4937	ns	ns	ns
ZT19-20	0.9463	0.3941	0.9300	0.4978	0.8826	0.6145	ns	ns	ns
ZT20-21	0.9414	0.5798	0.8807	0.3993	0.6656	0.3446	ns	ns	ns
ZT21-22	0.3539	0.9949	0.9476	0.7408	0.6482	0.4334	ns	ns	ns
ZT22-23	0.2121	0.5568	0.2526	0.1485	0.0365	0.5154	ns	ns	ns
ZT23-24	0.1292	0.0414	0.0952	0.0139	>0.9999	0.0437	ns	ns	ns
ZT24-25	0.8655	0.7913	0.6770	0.0139	0.0274	0.5071	ns	ns	ns
ZT25-26	0.9087	0.7469	0.7692	0.0170	0.0940	0.0012	ns	ns	ns
ZT26-27	0.1199	0.8552	0.0069	0.0027	0.0055	0.1198	ns	ns	ns
ZT27-28	0.0468	0.1457	0.0236	0.1713	0.0057	0.0069	ns	ns	ns
ZT28-29	0.0013	0.0871	0.0115	0.9998	0.8844	0.3795	ns	ns	ns
ZT29-30	0.0036	0.9752	0.0010	0.6750	0.6980	0.9888	ns	ns	ns
ZT30-31	0.1281	0.8489	<0.0001	0.9690	0.0034	0.9888	ns	ns	ns

Figure S2B	Group									Time		Interaction	
	Data			DFn, DFd	F	p	F	p	F	p			
	Total sleep			2, 87	0.7374	0.4813	196.3	<0.0001	2.6170	<0.0001			
Sleep episodes			2, 87	9.0790	0.0003	20.05	<0.0001	0.8662	0.7583				
P(wake)			2, 87	1.4220	0.2467	181.0	<0.0001	2.6300	<0.0001				
Dunnett's multiple comparisons													
MB043B/dTrpA1 vs MB043B/+				MB043B/dTrpA1 vs dTrpA1/+				Summary					
Total sleep		Sleep episodes		P(wake)	Total sleep		Sleep episodes		P(wake)				
ZT0-1	0.0542	0.0947	0.0895	0.0083	0.0087	0.8686	ns	ns	ns				
ZT1-2	0.0773	0.2427	0.5187	0.1517	0.1117	0.1746	ns	ns	ns				
ZT2-3	0.3812	0.7501	0.1942	0.1885	0.3468	0.0902	ns	ns	ns				
ZT3-4	0.8887	0.9643	0.8913	0.5610	0.4246	0.2496	ns	ns	ns				
ZT4-5	0.1860	0.6133	0.3141	0.3599	0.2616	0.9949	ns	ns	ns				
ZT5-6	0.0257	0.3878	0.0367	0.0074	0.3989	0.0040	*	ns	*				
ZT6-7	0.4763	0.5832	0.3301	0.1268	0.7228	0.4315	ns	ns	ns				
ZT7-8	0.4915	0.9954	0.9840	0.1722	0.8730	0.0294	ns	ns	ns				
ZT8-9	0.9269	0.0304	0.2414	0.2756	0.7988	0.2011	ns	ns	ns				
ZT9-10	0.0431	0.1218	0.1413	0.5599	0.0637	0.3395	ns	ns	ns				
ZT10-11	0.0397	0.2360	0.1278	0.0063	0.0454	0.5039	*	ns	ns				
ZT11-12	0.3379	0.7433	0.4231	0.0322	0.2603	0.0010	ns	ns	ns				
ZT12-13	0.0010	0.0923	0.0232	0.0099	0.6299	0.0261	**	ns	*				
ZT13-14	0.3856	>0.9999	0.1911	0.5492	0.0433	0.3573	ns	ns	ns				
ZT14-15	0.8210	0.9296	0.9701	0.9751	0.6404	0.7050	ns	ns	ns				
ZT15-16	0.2657	0.4844	0.8947	0.3767	0.6163	0.4584	ns	ns	ns				
ZT16-17	0.0167	0.7103	0.1198	0.0211	0.5542	0.2998	*	ns	ns				
ZT17-18	0.3970	0.7614	0.1917	0.5029	0.3777	0.2287	ns	ns	ns				
ZT18-19	0.4264	0.4994	0.2790	0.8455	0.1745	0.9340	ns	ns	ns				
ZT19-20	0.8153	0.8355	0.9636	0.7050	0.0930	0.9907	ns	ns	ns				
ZT20-21	0.4155	0.5319	0.8338	0.1225	0.6983	0.2679	ns	ns	ns				
ZT21-22	0.7446	0.9676	0.9880	0.6336	0.9920	0.3069	ns	ns	ns				
ZT22-23	0.6136	0.4624	0.9295	0.1035	0.9415	0.2829	ns	ns	ns				
ZT23-24	0.3903	0.2161	0.5840	0.3318	0.5054	0.1491	ns	ns	ns				
ZT24-25	0.3200	0.8207	0.0750	0.2397	0.6446	0.7277	ns	ns	ns				
ZT25-26	0.1311	0.9551	0.3670	0.1416	0.8683	0.0840	ns	ns	ns				
ZT26-27	0.3947	0.9924	0.1422	0.0485	0.1254	0.1170	ns	ns	ns				
ZT27-28	0.7008	>0.9999	0.4673	0.2948	0.0098	0.0488	ns	ns	ns				
ZT28-29	0.1018	0.3762	0.1138	0.9999	0.1909	0.7851	ns	ns	ns				
ZT29-30	0.1215	0.0680	0.0808	0.5694	0.1893	0.9435	ns	ns	ns				
ZT30-31	0.0503	0.1580	0.0209	0.7486	0.2126	0.8009	ns	ns	ns				

		Group			Time		Interaction	
Data		DFn, DFd	F	p	F	p	F	p
Figure S2C	Total sleep	2, 98	1.0650	0.3487	222.1	<0.0001	3.7180	<0.0001
	Sleep episodes	2, 98	2.5120	0.0863	32.28	<0.0001	1.9580	<0.0001
	P(wake)	2, 98	0.8850	0.4160	181.4	<0.0001	5.3520	<0.0001

Figure S2D	Data	DFn, DFd	Group		Time		Interaction	
			F	p	F	p	F	p
	Total sleep	2, 101	6.0000	0.0034	167.4	<0.0001	5.2050	<0.0001
	Sleep episodes	2, 101	13.20	<0.0001	17.65	<0.0001	2.5730	<0.0001

P(wake)			2, 104	2.194	0.1166	135.3	<0.0001	7.3347	<0.0001
Dunnett's multiple comparisons									
MB043B/shi ^{ts1} vs MB043B/+			MB043B/shi ^{ts1} vs shi ^{ts1} /+			Summary			
	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)	Total sleep	Sleep episodes	P(wake)
ZT0-1	0.1800	0.4486	0.0048	0.0103	0.0085	0.1223	ns	ns	ns
ZT1-2	0.9957	0.1574	0.5541	0.1346	0.4120	0.0026	ns	ns	ns
ZT2-3	0.8998	0.0948	0.2824	0.6483	0.5005	0.8577	ns	ns	ns
ZT3-4	0.9987	0.0428	0.9950	0.0070	0.0336	0.2015	ns	*	ns
ZT4-5	0.1434	0.0262	0.5763	<0.0001	0.8067	0.0006	ns	ns	ns
ZT5-6	0.3662	0.9111	0.0273	<0.0001	0.0406	<0.0001	ns	ns	*
ZT6-7	0.0409	0.5251	0.7056	<0.0001	0.9842	<0.0001	*	ns	ns
ZT7-8	0.0334	0.0232	0.0003	0.8532	0.3051	<0.0001	ns	ns	***
ZT8-9	0.0390	0.0486	0.0054	0.9213	0.9037	0.3300	ns	ns	ns
ZT9-10	0.6141	0.7464	0.8216	0.1060	0.8155	0.6512	ns	ns	ns
ZT10-11	0.8941	0.9994	0.5373	0.6583	0.0818	0.0220	ns	ns	ns
ZT11-12	0.2796	0.9921	0.7696	0.0028	0.0009	0.0023	ns	ns	ns
ZT12-13	0.7142	0.8039	0.6344	0.9829	0.7743	0.2227	ns	ns	ns
ZT13-14	0.1356	0.2098	0.5681	0.0129	0.0274	0.2156	ns	ns	ns
ZT14-15	0.0098	0.2677	0.0161	0.0082	0.0048	0.0168	**	ns	*
ZT15-16	0.1530	0.0158	0.0192	0.0623	0.0155	0.0329	ns	*	*
ZT16-17	0.0273	0.0110	0.0684	0.0072	0.0029	0.0475	*	*	ns
ZT17-18	0.0531	0.1402	0.1046	0.0115	0.0153	0.0087	ns	ns	ns
ZT18-19	0.0609	0.0210	0.1614	0.0004	0.0002	0.0038	ns	*	ns
ZT19-20	0.5793	0.0212	0.3301	0.0489	0.0513	0.0029	ns	ns	ns
ZT20-21	0.7019	0.2464	0.9120	0.0485	0.0173	0.3255	ns	ns	ns
ZT21-22	0.9867	0.5995	0.7299	0.0279	0.0600	0.0086	ns	ns	ns
ZT22-23	0.9994	0.8742	0.8509	0.6676	0.1044	0.3311	ns	ns	ns
ZT23-24	0.9922	0.1545	0.4956	0.7800	0.2270	0.9768	ns	ns	ns
ZT24-25	0.0029	0.1390	0.5547	0.0019	0.0072	0.9952	**	ns	ns
ZT25-26	0.0096	0.8586	0.0225	0.0065	0.0013	<0.0001	**	ns	*
ZT26-27	0.0539	0.3434	0.2088	0.5070	0.4646	0.0339	ns	ns	ns
ZT27-28	0.1591	0.3726	0.2383	0.1718	0.2547	0.9173	ns	ns	ns
ZT28-29	0.7048	0.2134	0.1502	0.0149	0.8512	0.1055	ns	ns	ns
ZT29-30	0.8512	0.1013	0.9681	0.0451	0.0135	0.0077	ns	ns	ns
ZT30-31	0.6151	0.6842	0.9183	0.0398	0.2023	0.0615	ns	ns	ns