



**Fig. S4 Daytime 40 Hz light flicker treatment cannot increase SWS amount in WT mice.** **a** Experimental design for daytime light treatment and sleep recordings. **b** Time-course of SWS in mice after normal light and 40 Hz light flicker treatments, respectively. (light treatment: 10:00 am-10 :30 am). **c** Amount of NREM and REM sleep in first 2 hours after normal light and 40 Hz light flicker treatments in mice, respectively. \* $p < 0.05$ ; 40 Hz VS normal light, significance was assessed by Student's t-test.