



**Figure S1. dMHb<sup>CKO</sup> mice have normal amounts of total sleep but fragmented sleep and increased REM sleep.** Summary of duration spent in wake, non-REM and REM sleep during the 24-h day (A) and during the light and dark phases (B). Shown are individual values, mean  $\pm$  SEM. (C) Representative 24-h hypnograms from control and a dMHb<sup>CKO</sup> mice. (D) Survival analysis indicates fragmentation of total sleep and non-REM sleep but longer REM bouts in dMHb<sup>CKO</sup> mice compared to control mice. (E) The 24-h distribution of REM intensity does not differ between dMHb<sup>CKO</sup> and control mice. N = 4 controls and 3 dMHb<sup>CKO</sup> mice in every case. \* p < 0.05.