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Figure S1: Characterization of Hdac6 -/- mice

(A) No difference in body mass was detected between 3-5-month-old Hdac6 -/- (KO) and wild type (WT) mice (n = 10). (B). RNA was isolated from the hippocampi of Hdac6 -/- and wild type mice and the expression of learning regulated genes$^{1,2}$ was analyzed via qPCR. No significant differences were observed (n = 6). Error bars indicate S.E.M.
Three and 16-month-old wild type and Hdac6 -/- mice were subjected to contextual fear conditioning training. Freezing behavior, indicative of associative learning, was analyzed 24 h later. In line with previous data\(^1\), we found that consolidation of associative memory was impaired in 16-month-old wild type when compared to 3-month-old wild type mice (\(P < 0.05\)). A similar age-dependent impairment was observed in Hdac6 -/- mice (\(P < 0.05\)). \(\textbf{(B)}\) We used quantitative immunoblot analysis to compare hippocampal \(\alpha\)-tubulin acetylation at lysine 40 (\(\alpha\)-tubulin K40ac) between 3- and 16-month-old wild type mice. No significant difference was observed between groups. In conclusion, these data suggest that HDAC6 is not implicated in age-associated memory disturbances. Error bars indicate S.E.M.

\textbf{References}