

Figure 9-figure supplement 1

Phase-locking of VTA spikes to mPFC theta oscillation

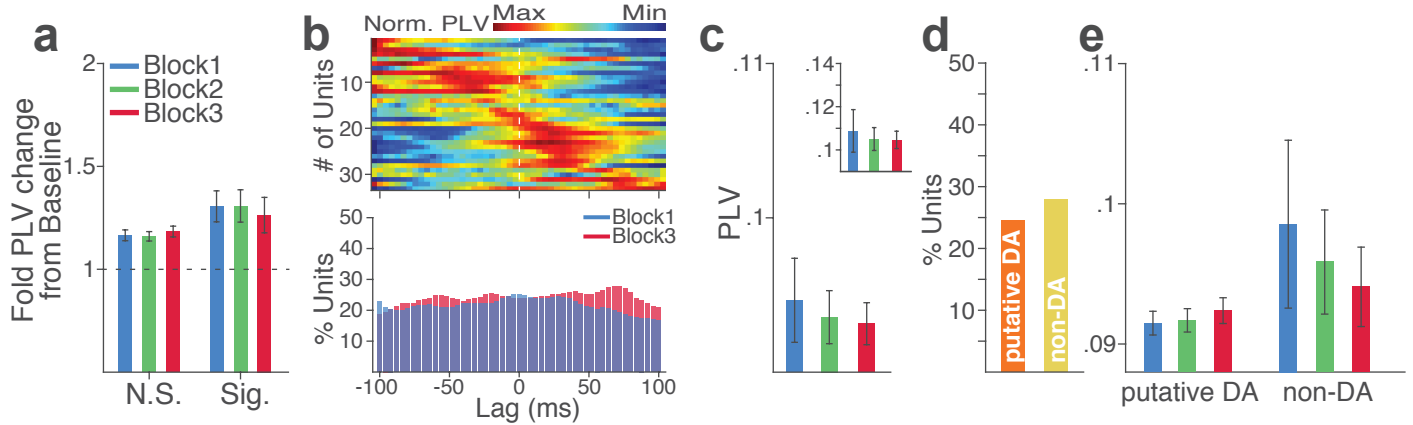


Figure 9-figure supplement 1. VTA single units show weak phase synchrony to the mPFC theta oscillation. (a) Fold change from baseline in the strength of the neuronal phase-locking. (b) Top, Normalized PLVs in block 1 for all phase-locked VTA units. The phase-locked units displayed their peak PLVs with negative or positive time lags, indicating weak phase modulation of VTA spike activity by the mPFC theta oscillation (Signed-rank test, $p = 0.129$). Bottom, Percentage of significantly phase-locked VTA units did not differ across blocks. (c) Mean \pm s.e.m. PLVs across different blocks. No significant change was found across blocks (Signed-rank test, p values > 0.33). (d) Percentage of phase-locked VTA putative DA and non-DA units. (e) PLVs of VTA putative DA and non-DA units plotted separately. PLVs did not differ across blocks in both VTA cell types (Signed-rank test, p values > 0.25).