



SUPPLEMENTAL FIGURE 1. Blocking KIF5 does not alter the enhancing effect of D4R on AMPAR-EPSC at low-activity state, while blocking SAP97 does not alter the reducing effect of D4R on AMPAR-EPSC at high-activity state. **A.** Plot of AMPAR-EPSC showing the effect of PD168077 in neurons (TTX-pretreated) injected with the antibody against KIF5 vs. the boiled control antibody (17 $\mu\text{g}/\text{ml}$). **B.** Plot of AMPAR-EPSC showing the effect of PD168077 in neurons (bicuculine-pretreated) dialyzed with anti-SAP97 antibody or boiled antibody (10 $\mu\text{g}/\text{ml}$).