Influence of the TARP $\gamma 8$ -selective negative allosteric modulator JNJ-55511118 on AMPA receptor gating and channel conductance

lan D. Coombs, Craig A. Sexton, Stuart G. Cull-Candy, Mark Farrant

Molecular Pharmacology MOLPHARM-AR-2021-000473

Fig S1. JNJ-118 effects on kinetics and steady-state current of GluA2(Q)/γ8.

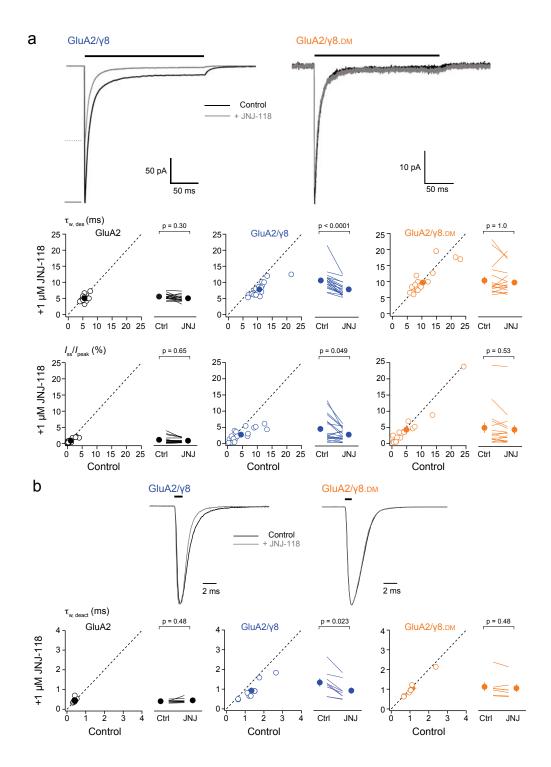


Figure S1. JNJ-118 effects on kinetics and steady-state current of GluA2(Q)/γ8

a) Representative outside-out patch responses (10 mM glutamate, 200 ms) (black bars) recorded at -60 mV from HEK293 cells transfected with GluA2/ γ 8 (left) or GluA2/ γ 8.DM (right) in control conditions (black) or in the presence of 1 μ M JNJ-118 (grey). Lower panels are scatter and paired plots (as in **Fig 2**) showing the effects of JNJ-118 on the weighted mean time constant of desensitization ($\tau_{w, des}$) and fractional steady-state component (I_{ss}/I_{peak}) for GluA2, GluA2/ γ 8 and GluA2/ γ 8.DM. Indicated p-values (adjusted for multiple comparisons as described in **Table 1**) are from two-sided Wilcoxon signed rank exact tests following a non-parametric omnibus test (**Table S1**). **b**) Representative outside-out patch responses (10 mM

glutamate, 1 ms) (black bars) recorded at -60 mV from HEK293 cells transfected with GluA2/ γ 8 (left) or GluA2/ γ 8.DM (right) in control conditions (black) or in the presence of 1 μ M JNJ-118 (grey). Lower panels are scatter and paired plots showing the effects of JNJ-118 on the weighted mean time constant of deactivation ($\tau_{w, deact}$) for GluA2, GluA2/ γ 8 and GluA2/ γ 8.DM. Indicated p-values (adjusted as described in **Table 1**) are from two-sided Wilcoxon signed rank exact tests following a non-parametric omnibus test (**Table S1**).