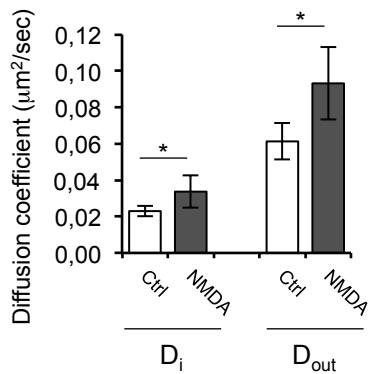
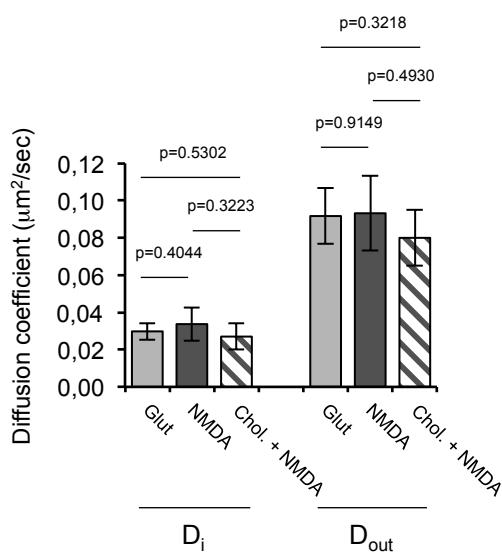


A



B



Supplementary Figure S4. No differences in lateral diffusion are observed between NMDA, glutamate or cholesterol + NMDA treated neurons.

A) NMDA stimulation increases the diffusion of synaptic and extra-synaptic AMPARs in 15 DIV. D_i control = $0.023 \pm 0.0028 \text{ mm}^2/\text{s}$, D_i NMDA = $0.0337 \pm 0.009 \mu\text{m}^2/\text{s}$ ($p = 0.0339$), D_{out} control = $0.0613 \pm 0.0099 \mu\text{m}^2/\text{s}$, D_{out} NMDA = $0.0932 \pm 0.02 \mu\text{m}^2/\text{s}$ ($p = 0.0496$).

B) No differences were observed in the lateral diffusion of synaptic and extra-synaptic AMPARs between glutamate or NMDA stimulated cells. The plot also shows that in control experiments, cholesterol addition to 15 DIV neurons does not affect the lateral diffusion of these receptors after stimulation.