

**Figure S2. Structural integrity of the NR complex and synaptic localization of components.**(A) Neurons expressing wildtype (wt) or calcium impermeable (R/-) NR1 subunits were stained at DIV 21 for PSD-95 (green) and counterstained for synapsin1 (red). scale bar, 5 μm.
(B) Analysis of the immunostaining (as in Figure S1) revealed comparable amounts of puncta immunopositiv for PSD-95 in both genotypes (per  $100 \mu M$  dendrite: wt,  $26\pm 2$ , n=18; R/-,  $28\pm 3$ , n=16) that were also colocalized with synapsin1 to a similar percentage (wt,  $87\pm 4\%$ , R/-,  $92\pm 4\%$ ; n=7). For NR2B immuno-positive puncta data were analysed equivalently. Puncta per  $100 \mu M$  dendrite: wt,  $19\pm 3$ , n=4; R/-,  $14\pm 2$ , n=5. Percent colocalization with PSD-95 positiv structures: wt,  $76\pm 4\%$ , R/-,  $77\pm 5\%$ ; n=8. All data are given as mean±SEM.