## Koscielny et al. - Online Resource 1. Supplementary Figures



**Figure S1.** Results of colocalization analysis of i-GluA2 with CD63 in the cell soma of neurons transfected and treated as in Fig. 6*A*, *B* after inclusion of randomization control. The data are expressed as a mean value normalized to control. Error bars indicate SEM. ns, non significant. Cell images were obtained from three independent culture batches. Number of cells per variant (n): pSuper (18) and shAP2b1 (26) for 36 h; pSuper (21) and shAP2b1 (20) for 72 h.



**Figure S2.** *A*, Representative Western blots showing levels of GluA1 and TrkB in protein extracts obtained from control DIV9 neurons or cells after 2 days rapamycin (RAPA, 100 nM) treatment. *B*, Results of quantitative WB analysis of GluA1 and TrkB levels, normalized to tubulin, in protein extracts of cells treated as in *A*. \*p < 0.05, \*\*p < 0.01 (one-sample t-test). Number of independent experiments (N): GluA1 (5), TrkB (4). Error bars indicate SEM.



**Figure S3**. Quantitative analysis of GluA2 internalization index in cultured hippocampal neurons at DIV10, untreated (w/o stimulation) or treated with 50  $\mu$ M AMPA+50  $\mu$ M AP5, 50  $\mu$ M NDMA+50  $\mu$ M CNQX, 90 mM KCl or 100 nM BDNF for indicated time points. The internalization index was calculated using the following formula: i-GluA2 / s-GluA2 + i-GluA2. The results are presented as a mean value normalized to control ± SEM. ns, nonsignificant; \*\*p < 0.01; (Mann Whitney test). Cell images were obtained from two independent culture batches. Number of cells per variant (n): 20.