



Supplemental Figure 4. GluR1 surface labeling of hippocampal cultures. Primary hippocampal cultures (18 DIV) were pre-treated with the  $\beta_2$ - versus  $\beta_1$ -selective antagonists ICI118551 and ICI89406, respectively, (15 min, 1  $\mu$ M each; B-E), the membrane-permeable peptide 11R-QGRNSNTNDSPL (DSPL; H,I) versus its inactive analog 11R-QGRNSNTNDAPA (DAPA; 1 h, 1  $\mu$ M each; J,K), or left untreated (A,F,G) before treatment with ISO (1  $\mu$ M) versus vehicle (VEH) for 15 min. Cultures were surface labeled with N-terminal GluR1 antibody (red in overlays), fixed, permeabilized, and counter labeled with anti-synaptophysin antibody (green; F-K only). ISO (right micrographs) led to a significant increase in surface expression of GluR1 that was specifically blocked by ICI118551 and DSPL but not ICI89406 and DAPA. n: number of neurons analyzed in at least 3 independent experiments for each condition.