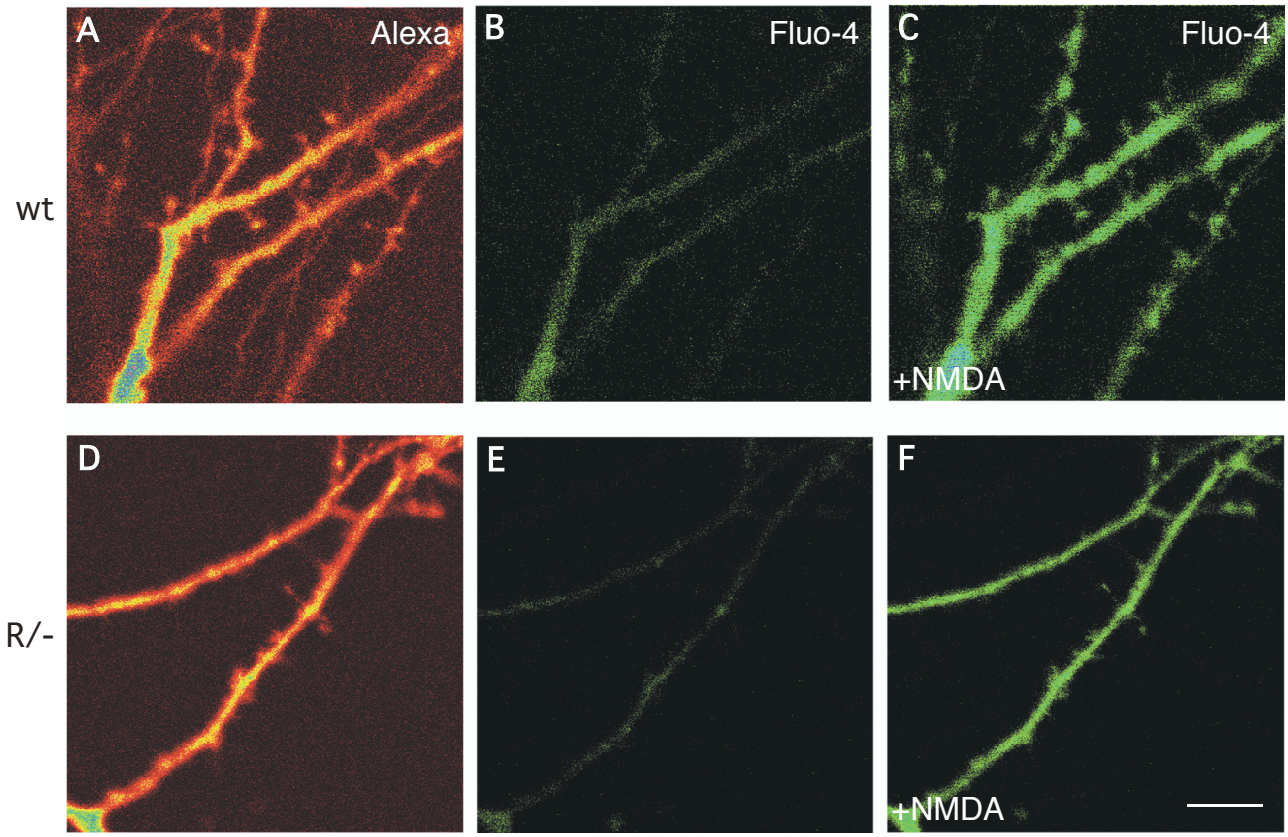

Figure S5. Bath application of NMDA elevates Ca^{2+} in dendrites and dendritic spines in both wild type and mutant cultures.
(A) A dendritic fragment of a single wildtype cell filled with the dyes Alexa and Fluo-4, imaged in the channel for Alexa fluorescence (red), which remained unchanged throughout the 20 min experiment.
(B-C) Fragment in A imaged in the Ca^{2+} sensitive Fluo-4 (green) channel in the baseline conditions (B) and during bath application of 10 μM NMDA (15 min) (C). Elevation of intracellular Ca^{2+} is clearly seen within the dendrites and dendritic spines.
(D-F) The same experiment as in A-C, but carried out in the $NR1^{R/-}$ mutant. Application of NMDA produces a clear Ca^{2+} elevation within the dendrite and spines (F). Scale bar, 3 μm.