**Supplementary Figure 3** PKA inhibitors and activators modulate Ca\(^{2+}\) influx through NMDARs. **a, b,** The PKA inhibitor H-89 (10 µM) inhibited NMDAR-mediated calcium rises in the soma (**a**) and dendrites (**b**) of hippocampal neurons at DIV7-14 in culture (\(n = 8\)). **c,** After application of the adenylyl cyclase inhibitor SQ 22536 (and depletion of cAMP), the PKA activator 8-Br-cAMP (100 µM) potentiated NMDA-elicited currents at 2 mM external Ca\(^{2+}\) (left traces, \(n = 6\); \(P < 0.01\)), but not at 0.1 mM external Ca\(^{2+}\) (right traces, reduction in steady-state current to 98 ± 7.8%; \(n = 4\); n.s.). Data at 2 mM Ca\(^{2+}\) are same as in Fig. 1c,f. Thus, the 8-Br-cAMP effect is Ca\(^{2+}\)-dependent. **d,** Summary graph of data in **c**.