Fura-2 AM microfluorimetry demonstrating AMPA and KCl-evoked intracellular Ca\(^{2+}\) rises in primary mouse cortical neurones. (A,B,C) Pseudocoloured images illustrating [Ca\(^{2+}\)]\(_i\) at baseline (A) and [Ca\(^{2+}\)]\(_i\) responses evoked by 50 µM AMPA (B) and 50 mM KCl (C). (D) Changes in [Ca\(^{2+}\)]\(_i\) (340 nm/380 nm ratio) of 44 individual neurones in response to sequential application of AMPA (50 µM) and KCl (50 mM). (E) Average 340 nm/380 nm ratio trace of neurones monitored in (D). Compounds were administered by superfusion in Na\(^+\) containing buffer.