Supplementary Figure 5  ATP reduces both quantal size and amperometric spike numbers in depolarization-induced secretion. (a) Typical lamp traces evoked by a 2 s depolarization in the presence or absence of 100 µM ATP. Insert: typical ICa traces evoked by 50 ms depolarization in the presence or absence of 100 µM ATP. ICa was inhibited by 25 ± 3% (n = 9). (b) Quantitative analysis of ASs induced by depolarization with or without ATP. Bar plots show that ATP reduced HHD from 6.3 ± 0.3 ms to 4.6 ± 0.3 ms, the foot duration from 5.2 ± 0.4 ms to 2.7 ± 0.2 ms, quantal size from 0.60 ± 0.04 pC to 0.33 ± 0.03 pC, and the foot charge from 51 ± 4 fC to 18 ± 3 fC. ATP reduced the number of depolarization-induced ASs from 26 ± 4 to 12 ± 3 (n = 12). (c) Typical lamp traces evoked by a 0.5 s depolarization from -70 mV to 0 mV or 30 mV. Insert: typical ICa traces evoked by 100 ms depolarization from -70 mV to 0 mV or 30 mV. ICa was inhibited by 27 ± 5% (n = 7). (d) ASs induced by depolarization from -70 mV to 0 mV or 30 mV. Bar plots show that the HHD was 6.4 ± 0.4 ms vs. 6.6 ± 0.5 ms, the foot duration was 5.2 ± 0.4 ms vs. 4.9 ± 0.3 ms, quantal size was 0.62 ± 0.06 pC vs. 0.66 ± 0.04 pC, and the foot charge was 52 ±6 fC vs. 59 ± 5 fC, induced by depolarization from -70 mV to 0 mV or 30 mV, respectively. The number of depolarization-induced ASs was 14 ± 3 vs. 8 ± 2 at 0 mV and 30 mV, respectively (n = 12).