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Supporting Material

Membrane Bending Energy and Fusion Pore Kinetics in Ca^{2+} -Triggered Exocytosis

Zhen Zhang and Meyer B. Jackson

Supplemental data for

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Zhang and Jackson

Fig. S1

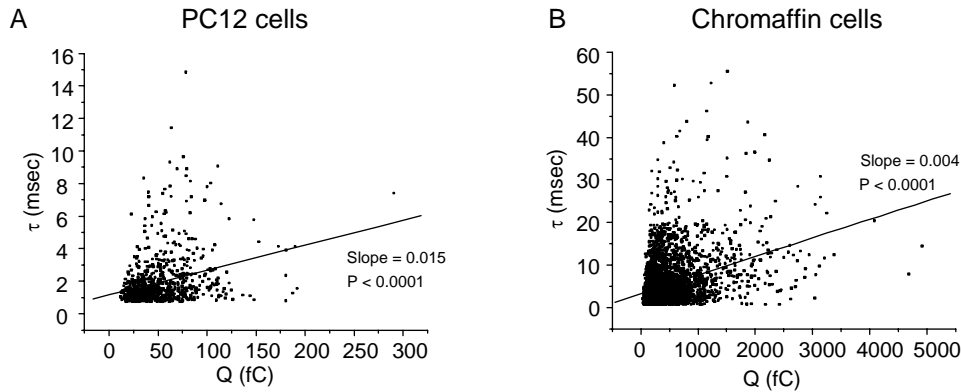


Fig. S1. Scatter plots of PSF lifetime (τ) versus total charge (Q) in > 1000 individual single vesicle release events from PC12 cells (A) and chromaffin cells (B). Linear regression showed highly significant correlations ($R = 0.29$ for PC12 cells and 0.35 for chromaffin cells; $P < .0001$ for the probability of no correlation for both plots). The plots were based on events > 20 pA peak amplitude and prespike foot duration ≥ 0.75 msec. These data were binned and transformed for Fig. 1. 1163 spikes recorded from 80 PC12 cells and 3956 spikes from 107 chromaffin cells.

Fig S2

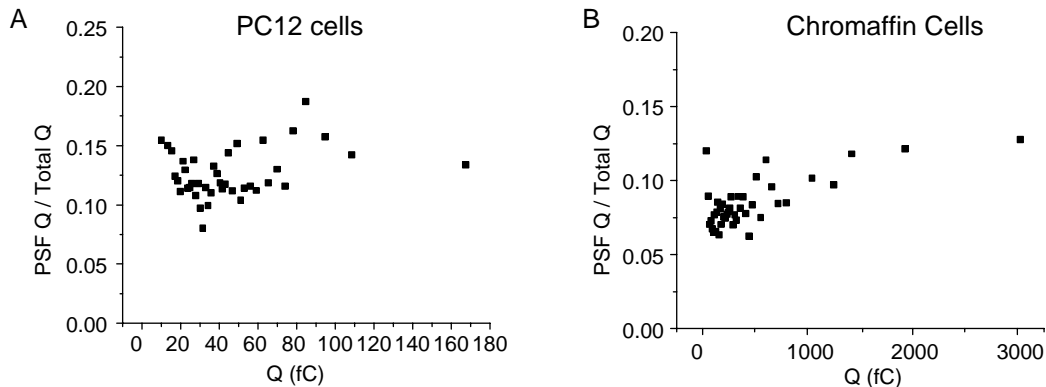


Fig. S2. Plots of fraction of total charge in a PSF ($\text{PSF } Q / \text{Total } Q$) versus total charge (Q) in a unitary event. Events were binned according to total charge and the fraction of charge in the PSF was averaged within each bin. The plots were based on events > 5 pA peak amplitude and prespike foot duration ≥ 0.75 msec. 1487 events from 80 PC12 cells and 6257 events from 107 chromaffin cells.