

Supplementary Material 5 Quantitative comparison of the spread of Ca^{2+} signal in IHCs during development

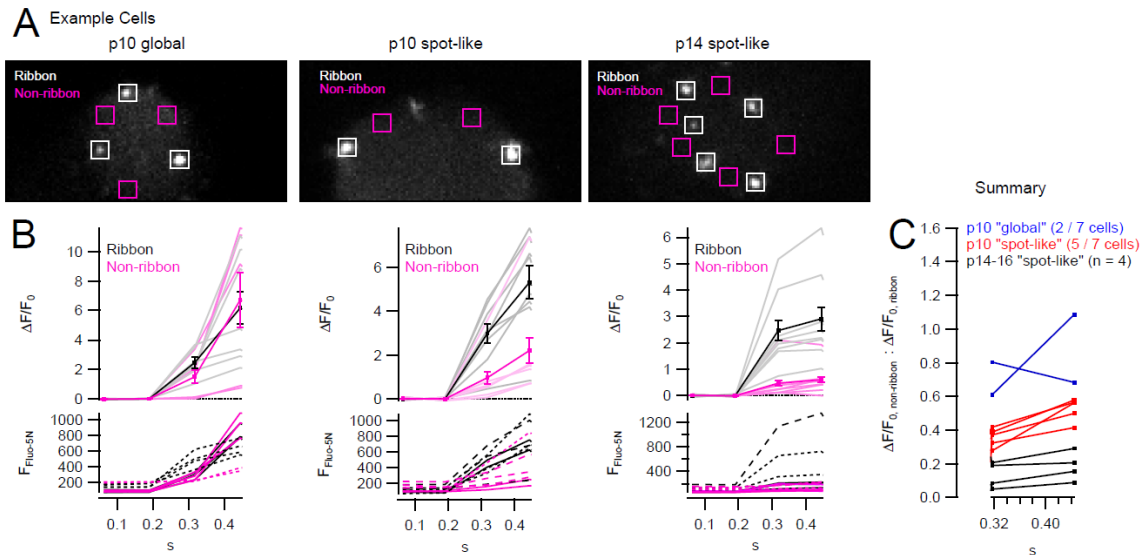


Figure S5. Quantitative comparison of the spread of Ca^{2+} signal in IHCs.

(A) Regions-of-Interest (ROIs) centered at ribbons (white boxes) and at non-ribbon (magenta boxes) areas, defined from presence or absence of Ribeye-binding peptide fluorescence. (B) Upper panels: Normalized fluorescence change ($\Delta F/F_0$) of Ca^{2+} indicator Fluo-5N (400 μM), upon a 254 ms depolarization to -7 mV (0.254 – 0.508 s, last two data points). Black and grey traces are average and individual traces from ribbon-centered ROIs; Magenta and pink traces are average and individual traces from non-ribbon ROIs. Lower Panels: raw fluorescence at these ROIs, broken line and dotted lines are obtained from different confocal sections. (C) Ratio of average $\Delta F/F_0$ at non-ribbon ROIs over ribbon-centered ROIs during depolarization, analyzed in a cell-by-cell basis and representing ratios of several pairs of neighboring ROIs per IHC.