

Supplementary Materials

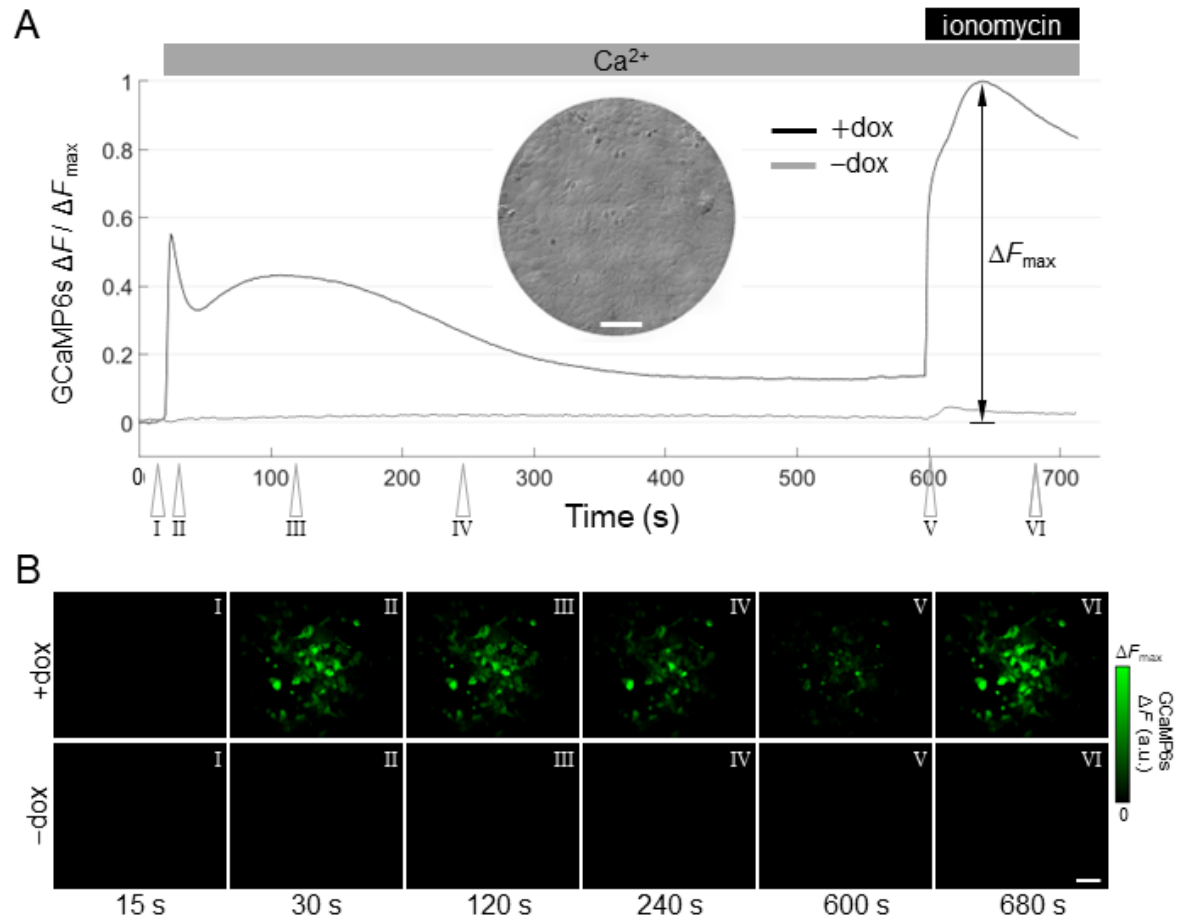


Figure S1. Representative Ca²⁺ uptake experiments in HaCaT-Cx26-GCaMP6s exposed or not exposed to dox. (A) Representative Ca²⁺ uptake experiments performed in cultures exposed (black) or not exposed (grey) to dox (2 μ g/mL) for 24 h. $\Delta F/\Delta F_{\max}$ traces were obtained by averaging GCaMP6s fluorescence intensity variation, ΔF , in all FOV pixels where baseline intensity exceeded an arbitrary threshold, and normalizing for ΔF_{\max} . Time $t = 0$ marks the onset of image acquisition. Inset: representative brightfield image of a cell culture prior to the experiment; scale bar, 100 μ m. (B) Representative sequences of fluorescence images acquired at the time points indicated by grey triangles beneath the x-axis of the graph in (A) and denoted with matching roman numbers. Scale bar: 100 μ m.

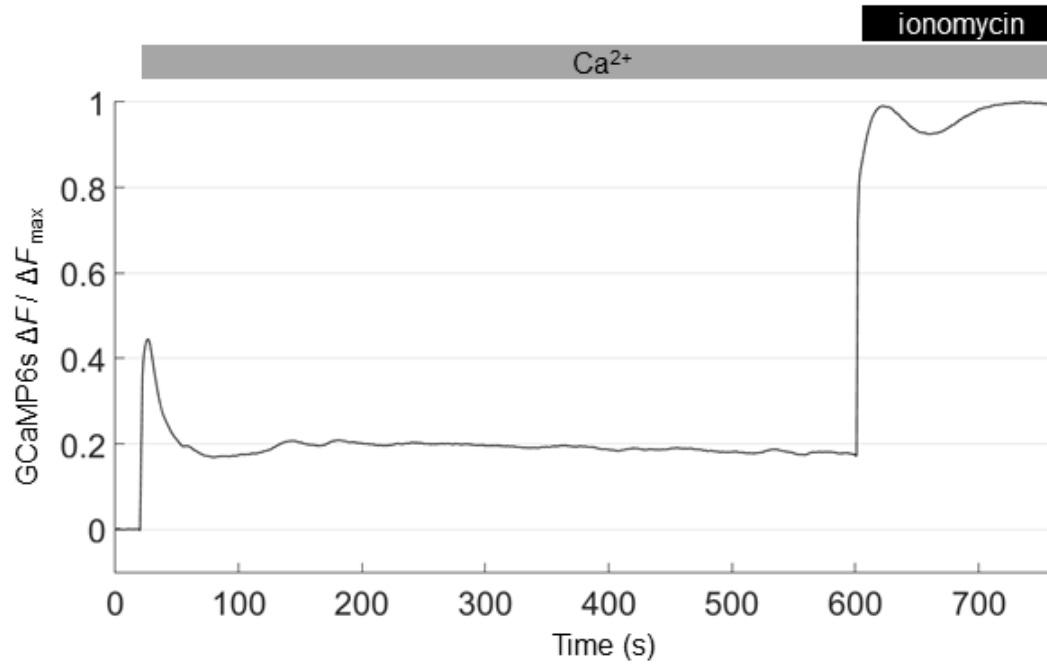


Figure S2. Ca^{2+} uptake response of HaCaT-Cx26-GCaMP6s cells exposed to an initial $[\text{Ca}^{2+}]_{\text{ex}}$ of 20 μM . Representative $\Delta F / \Delta F_{\max}$ trace obtained from a HaCaT-Cx26-GCaMP6s cell culture kept in a low initial $[\text{Ca}^{2+}]_{\text{ex}}$ (20 μM) and then exposed to a 1 M CaCl_2 bolus ($t = 20$ s). Time $t = 0$ marks the onset of image acquisition.

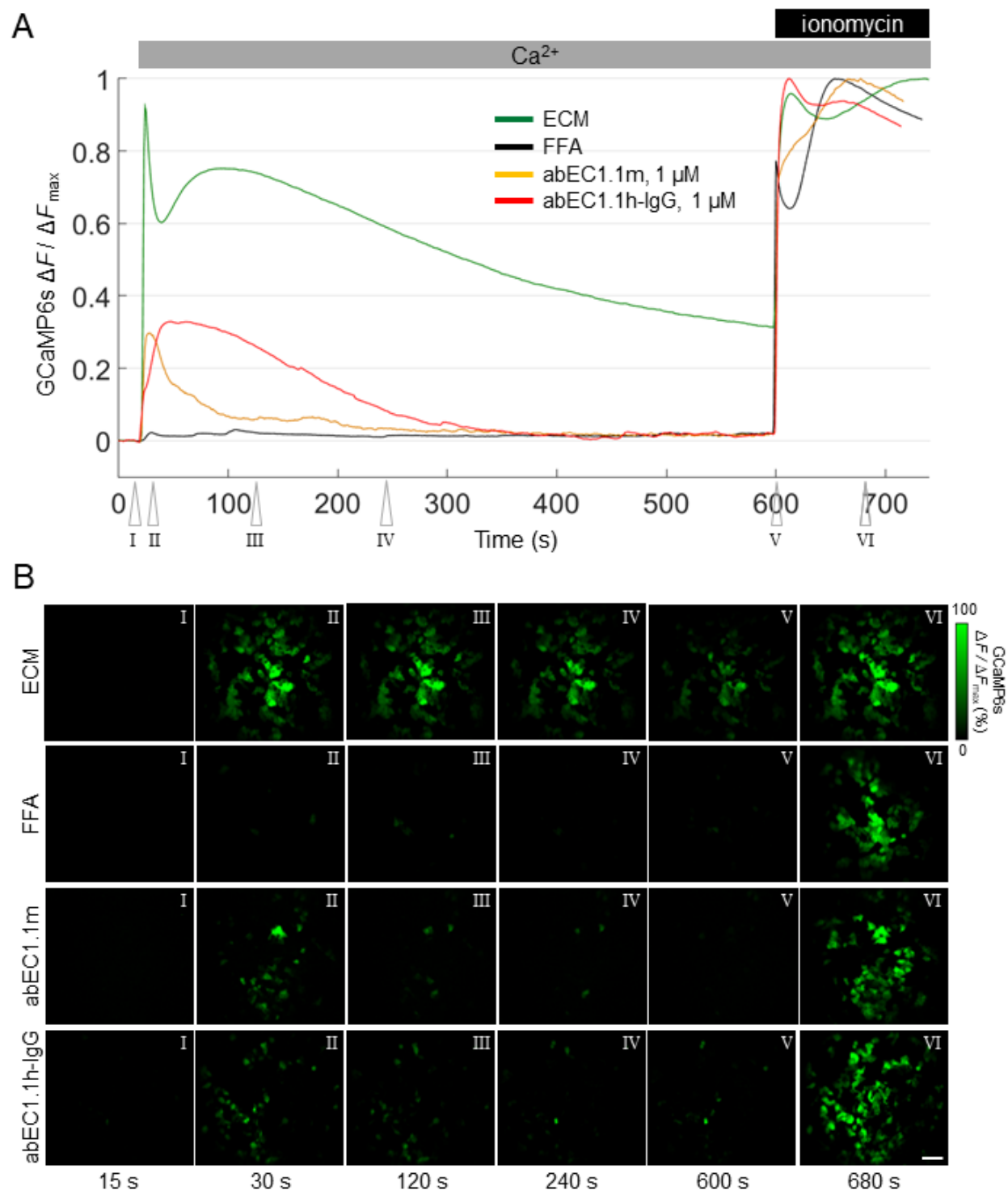


Figure S3. Representative Ca^{2+} uptake experiments for conditions shown in Figure 4C,D. (A) $\Delta F/\Delta F_{\text{max}}$ traces obtained from four HaCaT-Cx26-GCaMP6s cell cultures in one of the following extracellular media: ECM (green), ECM plus FFA (100 μM , black), ECM plus abEC1.1m (1 μM , orange) and ECM plus abEC1.1h-IgG (1 μM , red). Time $t = 0$ marks the onset of image acquisition. (B) Corresponding sequences of fluorescence images acquired at the time points indicated by gray triangles beneath the x -axis of the graph in (A) and denoted with matching roman numbers. Scale bar: 100 μm .

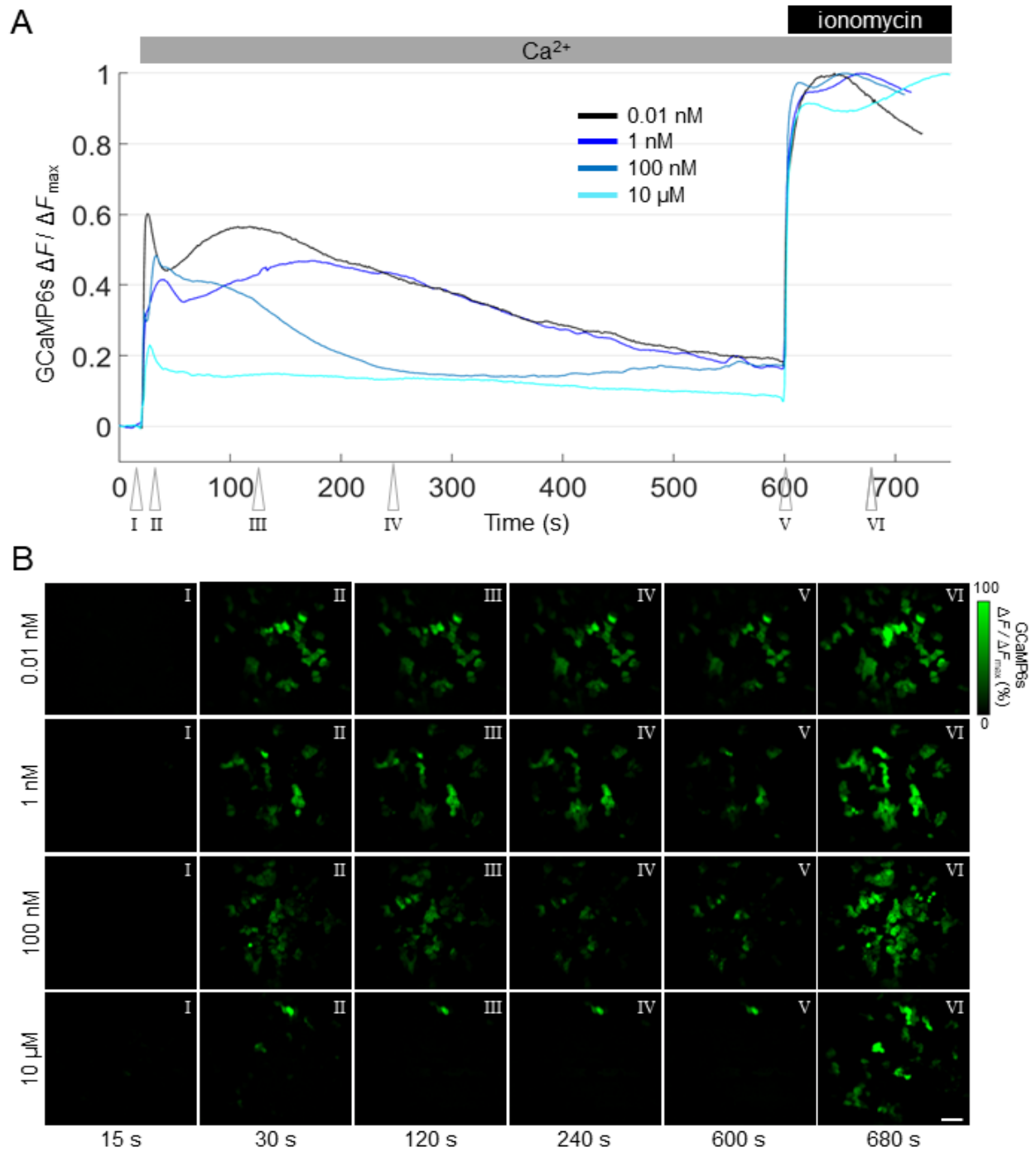


Figure S4. Representative Ca^{2+} uptake experiments for conditions shown in Figure 4E. (A) $\Delta F/\Delta F_{\text{max}}$ traces obtained from four HaCaT-Cx26-GCaMP6s cell cultures in ECM supplemented by abEC1.1h-IgG at one of the following concentrations: 0.01 nM (black), 1 nM (dark blue), 100 nM (light blue) and 10 μM (cyan). Time $t = 0$ marks the onset of image acquisition. (B) Corresponding sequences of fluorescence images acquired at the time points indicated by gray triangles beneath the x-axis of the graph in (A) and denoted with matching roman numbers. Scale bar: 100 μm .