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Supporting Material

Calmodulin mediates the Ca^{2+}-dependent regulation of Cx44 gap junctions

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Supplementary data

Calmodulin mediates the Ca^{2+}-dependent regulation of Cx44 gap junctions

Running Title: Connexin44 interacting with Ca^{2+}-calmodulin

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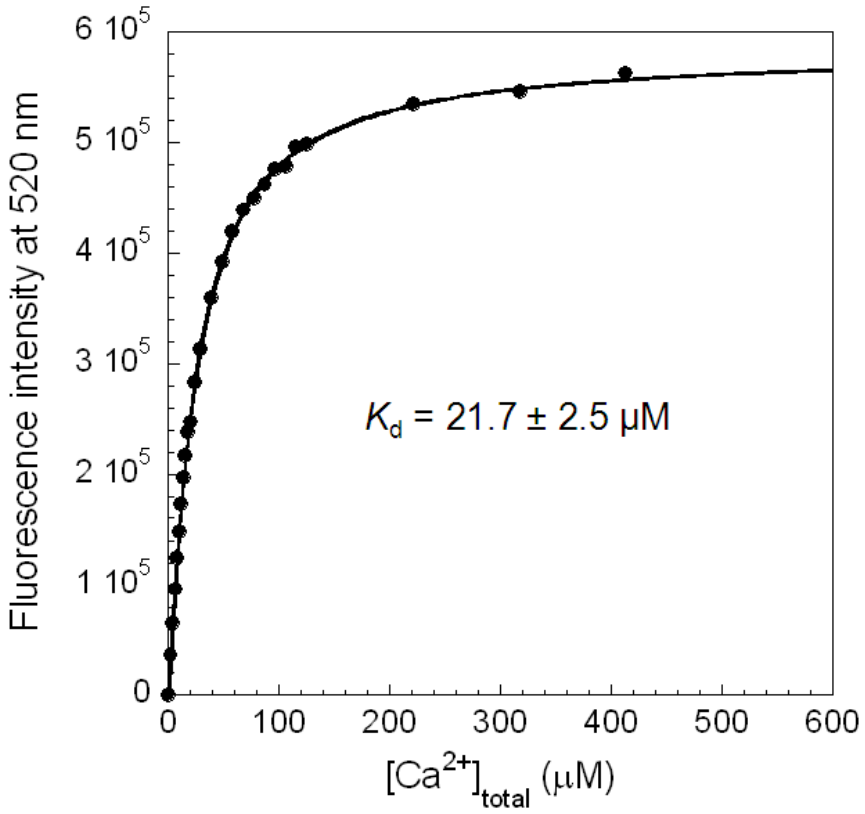

FIGURE S1 Ca^{2+} titration of the Ca^{2+}-indicator Oregon Green 488 BAPTA-5N. Fluorescence intensity at 520 nm was plotted as a function of total Ca^{2+} concentration. A dissociation constant of 21.7 ± 2.5 μM was obtained by fitting the curve with a 1:1 binding process in 50 mM HEPES, 100 mM KCl, at pH 7.5. Ca^{2+} concentration at each point during titration of CaM or CaM-peptide complexes was determined with the Ca^{2+} dye Oregon Green 488 BAPTA-5N (0.2 μM; λ_{ex} = 495 nm and λ_{em} = 520 nm) using the equation:

$$\left[Ca^{2+}\right]_{free} = K_d \times \frac{F - F_{\min}}{F_{\max} - F}$$