



Suppl. Fig. 1.

Restoration of intracellular Ca^{2+} release and Ca^{2+} currents following expression of chimera GFP-CLM in dysgenic myotubes. *A*) Field stimulation experiments (40 V, 10 ms, 0.3 Hz) evoked rapid intracellular Ca^{2+} transients in dysgenic myotubes expressing GFP-CLM. Ca^{2+} release was blocked by bath application of 0.5 mM Cd^{2+} / 0.1 mM La^{3+} , thus demonstrating cardiac-type (Ca^{2+} dependent) EC coupling (compare to Figs. 3B and 3C of Kasielke et al., 2003). Immediate $\text{Cd}^{2+}/\text{La}^{3+}$ block was observed in all of the 80 fluorescing cells examined. Arrows indicate pulse stimulations; the gray bar indicates $\text{Cd}^{2+}/\text{La}^{3+}$ application. *B*) Simultaneous recordings of depolarization-induced Ca^{2+} transients (upper) and whole-cell Ca^{2+} currents (lower) from myotubes expressing GFP- α_{1C} and GFP-CLM revealed comparable macroscopic characteristics from both constructs. Step depolarizations from -50 to +80 mV were applied in 10 mV increments (200-ms test pulses) from a holding potential of -80 mV. Electrophysiological recordings and subsequent analysis was performed as previously described (Kugler et al., 2004).