**Figure S1.** 1-s test potentials reveal near complete block of L-type current by 20 µM SKF 96356. L-type Ca\(^{2+}\) current was elicited by a 1-s depolarization from -50 to 30 mV after a prepulse protocol (see Materials and methods). The peak current amplitude (elicited by a 200-ms test pulse) before SKF 96356 application was 10.4 pA/pF.

**Figure S2.** I-V relationships for dysgenic myotubes expressing SkEIIIK in the presence and absence of 5 µM ±Bay K 8644. Currents were elicited at 0.1 Hz by test potentials ranging from -20 through +80 mV in 10-mV increments after a prepulse protocol (see Materials and methods). The reduced outward current in the presence of ±Bay K 8644 reflects entry of L-type channels into the long-duration open state (Leuranguer, V., R.T. Dirksen, and K.G. Beam. 2003. J. Gen. Physiol. 121:541–550).
Figure S3. Dantrolene partially inhibits Ca²⁺ entry during long depolarizations. Representative Ca²⁺ transients evoked by bath perfusion of 40 mM KCl Ringer’s solution for sham-incubated (20 min; ~25°C) normal myotubes (A) and normal myotubes exposed to 10 µM dantrolene for the same duration (B). In each case, myotubes were exposed to 200 µM ryanodine for >1 h at 37°C before experiments to block the contribution of RyR1 to the Ca²⁺ transient. (C) Summary. The asterisk indicates a significant difference in ΔF/F (P < 0.05; t test).