

Supplemental Data

Figure S1. Protein profile of wild-type and MDG/TRPC3 KD cells on D0 and D3 on SDS-PAGE gel. Cell lysate of wild-type or MDG/TRPC3 KD cells on D0 and D3 (30 µg of total protein) was subjected to SDS-PAGE (10%) followed by coomassie blue staining. There was no big difference in protein expression profiles between wild-type and MDG/TRPC3 KD cells on D0. Unlike cell lysate on D0, there were significant changes in the protein expression profiles between wild-type and MDG/TRPC3 KD cells on D3: mainly reduced or increased bands are indicated by the blue or red asterisks, respectively.

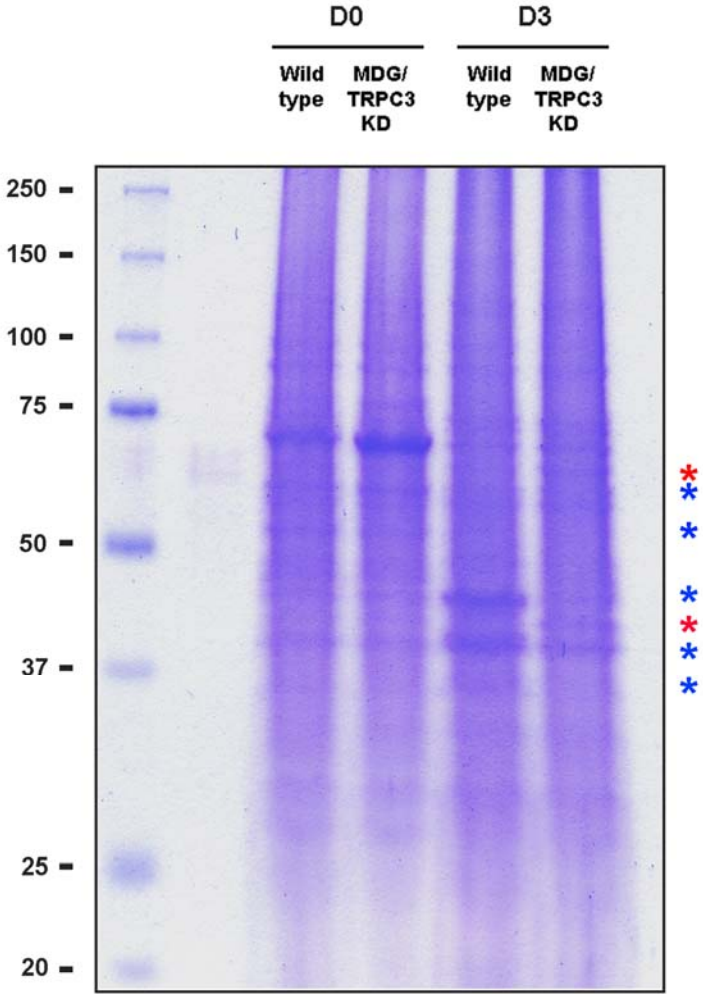


Figure S2. No Ca^{2+} transient in either wild-type or MDG/TRPC3 KD myoblasts in response to KCl or caffeine. KCl (a DHPR activator by inducing membrane depolarization) or caffeine (a direct agonist of RyR1) was applied to wild-type or MDG/TRPC3 KD myoblasts loaded with fura-2. No significant Ca^{2+} transient was observed in either type of myoblasts. At least 25 myoblasts of each type were tested. The traces were obtained from individual myoblasts.

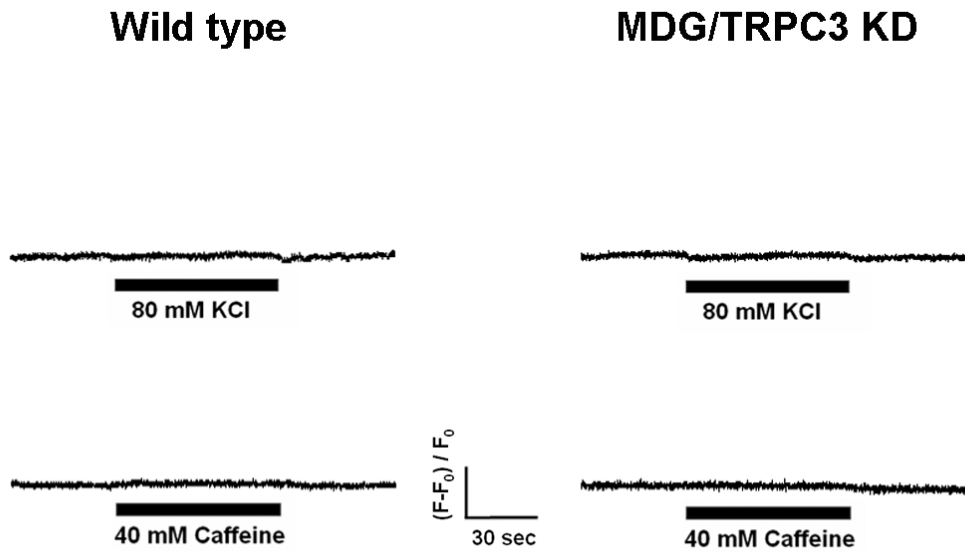


Figure S3. An increase in resting cytoplasmic Ca^{2+} level but no change in the SR Ca^{2+} content in MDG myoblasts. (A) The SR Ca^{2+} in MDG myoblasts loaded with fura-2 was depleted by treatment with 10 μM cyclopiazonic acid (CPA), and peak area for 400 sec normalized to that of wild-type controls in Figure 4 is shown in the histograms (right). There was no change in the SR Ca^{2+} content in MDG myoblasts compared with wild-type myoblasts. Results are means \pm SE (58 wild-type or 52 MDG myoblasts). The trace is an average of 4 traces. (B) Resting cytoplasmic Ca^{2+} levels in MDG myoblasts loaded with fura-2 were also normalized to that of wild-type controls in Figure 4 and are shown as histograms. Resting cytoplasmic Ca^{2+} was increased in MDG myoblasts compared with that of wild-type controls. Data are means \pm SE (31 wild-type or 35 MDG myoblasts). *significant difference compared with wild-type ($p < 0.05$).

