# **Supplemental Figure Legends**

#### **Supplemental Figure I**

**A.** Representative blot showing IP protocol on protein lysed from HEK293-T cells expressing neuronal WT-Ca<sub>L</sub> plated onto either fibronectin (FN) or BSA-coated dishes.  $\alpha_{1C}$ -Ca<sub>L</sub> was detected after IP using anti- $\beta_1$  integrin, anti-c-Src, or anti-Tyr-Pi Ab but only in cells expressing WT-Ca<sub>L</sub> when plated onto FN-coated dishes (lanes 1, 2, and 3 respectively), not in cells expressing WT-Ca<sub>L</sub> when plated onto BSA-coated dishes (lanes 6, 7, and 9, respectively).

**B.** Representative blot showing co-IP protocol on protein lysed from arteriolar smooth muscle (pulled down with anti- $\alpha_{1C}$ -Ca<sub>L</sub>). The same blot in **Fig. 3A** after stripping and reprobing for  $\alpha_{1C}$ -Ca<sub>L</sub>. Immunoprecipitated  $\alpha_{1C}$ -Ca<sub>L</sub> was observed in arterioles independent of incubation with FN (lanes 1 and 2 vs. lanes 5 and 6, respectively). Absence of immunoprecipitated  $\alpha_{1C}$ -Ca<sub>L</sub> by rabbit IgG (lane 7) indicates binding specificity.

#### **Supplemental Figure II**

An increased amount of truncated  $\alpha_{1C}$ -Ca<sub>L</sub> used for IP does not alter the reduced association between truncated  $\alpha_{1C}$ -Ca<sub>L</sub> and  $\beta_1$  integrin or c-Src.

**A.** Representative blot comparing WT- $\alpha_{1C}$ -Ca<sub>L</sub> and truncated  $\alpha_{1C}$ -Ca<sub>L</sub> (2-fold amount of total protein) immunoprecipitated with either anti-c-Src, anti-phosphorylated-tyrosine (Tyr-Pi), or anti- $\beta_1$  integrin Ab, and probed for  $\alpha_{1C}$ . Relatively lower amounts of  $\alpha_{1C}$ -Ca<sub>L</sub> were still observed in cells expressing truncated  $\alpha_{1C}$ -Ca<sub>L</sub>, when immunoprecipitated with anti-c-Src, anti-Tyr-Pi, or anti- $\beta_1$  integrin Ab (lanes 1, 2, and 3, respectively). **B**: The same blot in **A** after stripping and re-probing for  $\beta_1$  integrin **C**: Summary graph showing the relative levels of immunoprecipitated  $\alpha_{1C}$  in WT- or increased amount of truncated  $\alpha_{1C}$ -Ca<sub>L</sub>. Values were obtained as described in Methods, and based on the average of at least three experiments.

\*p<0.05 vs.WT + anti- $\beta_1$  integrin Ab; \*\*p<0.01 vs. WT + anti-Tyr-Pi Ab;\*p<0.05 vs. WT + anti-c-Src Ab.

### **Supplemental Figure III**

**A.** The same blot as in **Fig**. **4A** after stripping and re-probing for c-Src as a control for IP and immunoblotting.

Representative blot comparing WT- and truncated  $\alpha_{1C}$ -Ca<sub>L</sub> immunoprecipitated with either anti-c-Src, anti- $\beta_1$  integrin Ab, or mouse IgG and probe for c-Src. The presence of c-Src was observed in lysates immunoprecipitated with anti-c-Src (lanes 2 and 7) or anti- $\beta_1$  integrin Ab (lanes 1 and 8) but not with mouse IgG (lanes 3 and 6).

**B**. The same blot as in **Supplemental Fig**. **IIA** after stripping and re-probing for c-Src as a control for IP and immunoblotting.

Representative blot comparing WT- $\alpha_{1C}$ -Ca<sub>L</sub> and truncated  $\alpha_{1C}$ -Ca<sub>L</sub> (2-fold amount of total protein used for IP) immunoprecipitated with either anti-c-Src, anti-phosphorylated-tyrosine (Tyr-Pi), or anti- $\beta_1$ integrin Ab and probed for c-Src. c-Src was detected when immunoprecipitated with anti-c-Src, anti-Tyr-Pi, or anti- $\beta_1$  integrin Ab (lanes 1, 2, and 3, or lanes 8, 7, and 6 respectively). No substantial differences were observed in the levels of c-Src in HEK293-T cells over-expressing truncated  $\alpha_{1C}$ -Ca<sub>L</sub> compared to WT  $\alpha_{1C}$ -Ca<sub>L</sub>.

## **Supplemental Figure IV**

A. The same blot as in Fig. 5A after stripping and re-probing for c-Src as a control for IP and immunoblotting.

Representative blot comparing WT  $\alpha_{1C}$ -Ca<sub>L</sub> and S<sup>1901</sup>A/Y<sup>2122</sup>F  $\alpha_{1C}$ -Ca<sub>L</sub> immunoprecipitated with either anti-c-Src, anti-Tyr-Pi, or anti- $\beta_1$  integrin Ab, and probe for c-Src. No substantial differences were observed in the protein level of c-Src in HEK293-T cells over-expressing S<sup>1901</sup>A/Y<sup>2122</sup>F  $\alpha_{1C}$ -Ca<sub>L</sub> compared to WT  $\alpha_{1C}$ -Ca<sub>L</sub> (lanes 1, 2, and 3, vs. lanes 8, 7, and 6, respectively).

**B.** The same blot in **Fig. 6A** after stripping and re-probing for c-Src as control for IP and immunoblotting. Representative blot comparing WT  $\alpha_{1C}$ -Ca<sub>L</sub> and  $\Delta P1/\Delta P2 \alpha_{1C}$ -Ca<sub>L</sub> immunoprecipitated with anti-c-Src, anti- $\alpha_5$  integrin, or anti- $\beta_1$  integrin Ab and probe for  $\alpha_{1C}$ -Ca<sub>L</sub> (lanes 4 and 8, lanes 3 and 7, and lanes 2 and 6, respectively). No substantial differences were observed in the protein level of c-Src in cells expressing  $\Delta P1/\Delta P2 \alpha_{1C}$ -Ca<sub>L</sub>, compared to WT  $\alpha_{1C}$ -Ca<sub>L</sub>.

### **Supplemental Figure V**

Immunofluorescence confocal images showing cells stained with either anti-mouse IgG (row M; panels a, b, and c), anti-rabbit IgG (row R; panels, d, e, and f), the combination of both IgG (row M+R; panels g, h, and i) or no staining (panels j, k, and l). No specific fluorescence was observed when cells were excited with either 488 nm or 555 nm laser lines. These images assure the staining specificity of our results and minimal bleed-through of the secondary antibodies to interfere with detection and data analysis. Magnification: 63X oil; scale bar = 10  $\mu$ m.