SUPPLEMENTAL MATERIAL

Table S1. Antibody list.

Use: Western Blot	**Company**	**Primary antibody dilution**	**Secondary antibody dilution**
Goat anti-SERCA2a	Santa Cruz Biotechnology (sc-8095)	1:1000	Donkey anti-goat 680 1:5000 (925-68074)
Rabbit anti NCX-1	Santa Cruz Biotechnology (sc-30304)	1:500	Donkey anti-rabbit 800 1:5000 (925-32213)
Rabbit anti-CamKII	ThermoFisher (PA5-39732)	1:500	Donkey anti-rabbit 800 1:5000 (925-68074)
Rabbit anti-pCamKII	Thermofisher (PA5-39731)	1:500	Donkey anti-rabbit 800 1:5000 (925-68074)
Rabbit anti-LTCC	Alomone Labs (ACC-003)	1:500	Donkey anti-rabbit 800 1:5000 (925-68074)
Rabbit anti-LTCC (pSer 1928)	Badrilla (A010-70)	1:250	Donkey anti-rabbit 800 1:5000 (925-68074)
Rabbit anti-RYR2	Millipore (AB9080)	1:500	Donkey anti-rabbit 800 1:5000 (925-68074)
Rabbit anti-RYR2 (pSer2814)	Badrilla (A010-31)	1:1000	Donkey anti-rabbit 800 1:5000 (925-68074)
Rabbit anti-RYR2 (pSer2808)	Badrilla (A010-30)	1:3000	Donkey anti-rabbit 800 1:5000 (925-68074)

Mouse anti-PLN	Thermofisher (MA3-922)	1:1000	Donkey anti-mouse 680 1:5000 (925-68072)
Rabbit anti-PLN (pSer16)	Badrilla (A010-12AP)	1:1000	Donkey anti-rabbit 800 1:5000 (925-68074)
Rabbit anti-PLN (pThr17)	Badrilla (A010-13)	1: 3000	Donkey anti-rabbit 800 1:5000 (925-68074)
Goat anti-GAPDH	SICGEN (AB0067-200)	1:10000	Donkey anti-goat 680 1:5000 (925-68074)
Rabbit anti-GST	Cell Signaling Technology (#2622)	1:500	Donkey anti- rabbit 800 1:5000 (925-68074)
Use: PLA on Paraffin Sections	**Company**	**Primary antibody dilution**	**Secondary antibody dilution**
Goat anti-MYL2	Santa Cruz Biotechnology (sc-34490)	1:50	Donkey anti-goat 1:200 (A11055)
Mouse anti-SERCA2a	Thermofisher (MA3-919)	1:50	N/A
Mouse anti-NCX-1	Thermofisher (MA3-926)	1:50	N/A
Rabbit anti-Pin1	Santa Cruz Biotechnology (sc-15340)	1:20	N/A

Use: PLA on fixed cardiomyocyte	**Company**	**Primary antibody dilution**	**Secondary antibody dilution**
Goat anti-MYL2	Santa Cruz Biotechnology (sc-34490)	1:100	Donkey anti-goat 1:200 (A11055)
Mouse anti-SERCA2a	Thermofisher (MA3-919)	1:100	N/A
Mouse anti-NCX-1	Thermofisher (MA3-926)	1:100	N/A
Rabbit anti-Pin1	Santa Cruz Biotechnology (sc-15340)	1:50	N/A

Figure S1. pCamKII/CamKII (A), pLTCC/LTCC(B), pPLN (Ser16 and Thr 17)/PLN (C) and pRyR2 (Ser2808 and Ser2814)/RyR2 (D) expression and phosphorylation levels are unaltered in Pin1 deficient hearts. Phosphorylated Ca^{2+}/Calmodulin-dependent kinase II (pCamKII)/CamKII (A), phosphorylated L-type Ca2+ channel (LTCC)/LTCC(B), phosphorylated Phospholamban (PLN) (Ser16 and Thr 17)/PLN (C) and pRyR2 (Ser2808 and Ser2814)/RyR2 expression and phosphorylation levels are unaltered in Peptidyl Prolyl Isomerase $(Pin1)^{+/-}$ and $Pin1^{-/-}$ hearts compared to wild-type (WT) by immunoblot analysis. GAPDH used as loading control. Quantitation of protein expression shown below each representative blot as n-fold expression/WT. Data presented as mean±SEM, N=4.

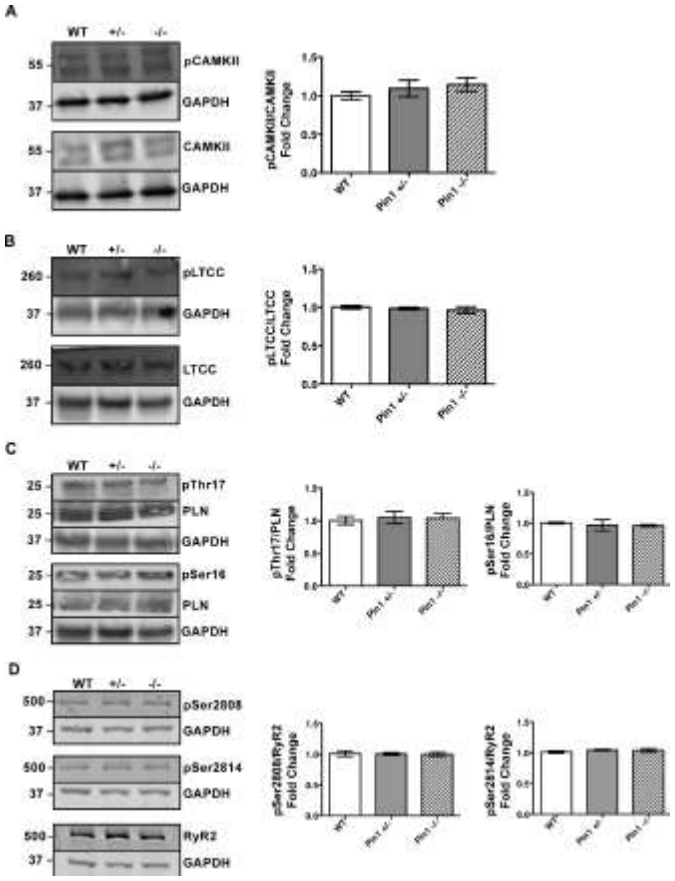

Figure S2. Putative consensus motifs for Pin1 binding on SERCA2a and NCX-1 protein sequences identified by in silico analysis. (A) sarco(endo)plasmic reticulum calcium ATPase (SERCA2a) sequence accession number NP_033852.1 (murine; NCBI protein database) or **(B)** Na^{2+}/Ca^{2+} exchanger 1 (NCX-1) sequence accession number NP_035536.2 (murine; NCBI protein database) analyzed for serine next to a proline residue (black squares) or threonine next to a proline (red squares).

Figure S3 SERCA2a and NCX-1 physically interact with GST-Pin1

(A) Immunoblot for Glutathione S-Transferase (GST) (left) and GST-Pin1 (right) showing GST and GST-Pin1 protein expression at 25 and 45 kDa respectively. (**B**) Na^{2+}/Ca^{2+} exchanger 1 (NCX-1) and sarco(endo)plasmic reticulum calcium ATPase (SERCA2a) interacted with GST-Pin1 but not with GST upon pull-down as shown by immunoblot. β-catenin and AKT were used as positive control for the pull-down since are known targets of Pin1. N=3