

## Major Resources Table

In order to allow validation and replication of experiments, all essential research materials listed in the Methods should be included in the Major Resources Table below. Authors are encouraged to use public repositories for protocols, data, code, and other materials and provide persistent identifiers and/or links to repositories when available. Authors may add or delete rows as needed.

### Animals (in vivo studies)

Species	Vendor or Source	Background Strain	Sex	Persistent ID / URL
Mice	The Jackson laboratory	C57Bl6/J	Male and female	<a href="#">000664 - C57BL/6J (jax.org)</a>
Rats	Janvier	Wistar	male	<a href="#">WISTAR Rat - Janvier Labs (janvier-labs.com)</a>

### Antibodies

Target antigen	Vendor or Source	Catalog #	Working concentration	Lot # (preferred but not required)	Persistent ID / URL
AKAP18δ	Enno Klussmann	Not available	1:1000 WB		
AKAP18δ	Genscript (custom made)	172166-1	1:1000 WB		
Total PLN	Thermo Fisher Scientific	MA3-922	1:80 000 WB		<a href="#">Phospholamban Antibody (MA3-922) (thermofisher.com)</a>
pThr17-PLN	Badrilla	A010-13	1:5000 WB		<a href="#">Phospholamban (PLN, PLB) (pThr17) pAb serum   Badrilla</a>
pSer16-PLN	Badrilla	A010-12	1:5000 WB		<a href="#">Phospholamban (PLN, PLB) (pSer16) pAb   Badrilla</a>
CaMKIIδ	Genscript (custom made)	511865-1/-2	1:1000 WB		
pThr286-CaMKII	abcam	ab2724	1:2000 WB		<a href="#">Anti-CaMKII (phospho T286) antibody [22B1] (ab2724) is not available (abcam.com)</a>
CaM	Cell Signaling	4830	1:250 WB		<a href="#">Calmodulin Antibody   Cell Signaling Technology</a>
GFP	Clontech	682381	1:5000 WB		Discontinued
SERCA2	Thermo Fisher Scientific	MA3-919	1:250 WB		<a href="#">SERCA2 ATPase Antibody (MA3-919) (thermofisher.com)</a>
Total RYR	Thermo Fisher Scientific	MA3-916	1:1000 WB		<a href="#">Ryanodine Receptor Antibody (MA3-916) (thermofisher.com)</a>

DOI [to be added]

pSer2814-RYR	Badrilla	A010-31	1:5000 WB	<a href="#">Ryanodine receptor 2 (RYR2) (pSer2814) pAb   Badrilla</a>
pSer2808-RYR	Badrilla	A010-30	1:5000 WB	<a href="#">Ryanodine receptor 2 (RYR2) (pSer2808) pAb serum   Badrilla</a>
GAPDH	Santa Cruz	sc-20357	1:500 WB	<a href="#">GAPDH Antibody (V-18)   SCBT - Santa Cruz Biotechnology</a>
HIS	GenScript	A00186	1:500 WB	<a href="#">THE™ His Tag Antibody, mAb, Mouse Antibody - GenScript</a>
Monoclonal anti-biotin conjugated beads	Merck Sigma	A-1559	1:5000 WB	<a href="#">Monoclonal Anti-Biotin–Agarose antibody produced in mouse clone BN-34, purified immunoglobulin, PBS suspension (sigmaaldrich.com)</a>
Horseradish peroxidase (HRP) conjugated anti-mouse	Cytiva	NA931V	1:3000 WB	<a href="#">Mouse IgG HRP Linked Whole Ab Cytiva, NA931-1ML (sigmaaldrich.com)</a>
Horseradish peroxidase (HRP) conjugated anti-rabbit	Cytiva	NA934V	1:3000 WB	<a href="#">Rabbit IgG HRP Linked Whole Ab Cytiva, NA934-1ML (sigmaaldrich.com)</a>
Monoclonal anti-rabbit light chain specific	Jackson ImmunoResearch	211-002-171	1:10 000 WB	<a href="#">Secondary Antibodies - Jackson ImmunoResearch</a>
Anti-goat HRP	R&D Systems	HAF109	1:3000 WB	<a href="#">Goat IgG HRP-conjugated Antibody HAF109: R&amp;D Systems (rndsystems.com)</a>
GST HRP	Cytiva	RPN1236	1:5000 WB	<a href="#">Anti-GST HRP Conjugate Cytiva, RPN1236, pack of 75 µL (sigmaaldrich.com)</a>
6x-HIS tag	Thermo Fisher Scientific	46-0707	1:5000 WB	<a href="#">6x-His Tag Antibody, HRP (R931-25) (thermofisher.com)</a>
Anti-biotin	Merck Sigma	A-0185	1:5000 WB	<a href="#">Monoclonal Anti-Biotin–Peroxidase antibody produced</a>

					<a href="#">in mouse clone BN-34, purified immunoglobulin (sigmaaldrich.com)</a>
RYR	Merck Sigma	HPA020028	1:100		<a href="#">Anti-RYR2 antibody produced in rabbit Prestige Antibodies® Powered by Atlas Antibodies, affinity isolated antibody, buffered aqueous glycerol solution (sigmaaldrich.com)</a>
CaMKII	Abcam	ab171095	1:100		<a href="#">Phospho CaMKII (T286) antibody [22B1] (ab171095)   Abcam</a>
anti- $\alpha$ -actinin	Abcam	ab9465	1:100		<a href="#">Anti-Sarcomeric Alpha Actinin antibody [EA-53] (ab9465)   Abcam</a>
RYR	ThermoFisher	MA3-916	1:100		<a href="#">Ryanodine Receptor Antibody (MA3-916) (thermofisher.com)</a>
pThr286-CaMKII	Abcam	ab171095	1:100		<a href="#">Phospho CaMKII (T286) antibody [22B1] (ab171095)   Abcam</a>

### DNA/cDNA Clones

Clone Name	Sequence	Source / Repository	Persistent ID / URL
AKAP18 $\delta$ -YFP and AKAP18 $\delta$ -YFP deletion mutants		Stefan E, et al. <i>J Am Soc Nephrol.</i> 2007;18:199-212	
His-CaMKII $\delta$ -T287D	NM_012519	Genscript (custom made)	
GST-AKAP18 $\delta$		Schafer G, et al. <i>Angew Chem Int Ed Engl.</i> 2013;52:12187-91	

### Cultured Cells

Name	Vendor or Source	Sex (F, M, or unknown)	Persistent ID / URL
HEK293	ATCC CRL-1573	Not relevant	<a href="#">293 [HEK-293]   ATCC</a>
Neonatal rat cardiomyocytes	Møllegaard Breeding and Research Center, Denmark	Both gender (1-3 days old)	

### Other

Description	Source / Repository	Persistent ID / URL
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DOI [to be added]

Collagenase II	#LS004176, Worthington Biochemical Corp.	<a href="http://www.worthington-biochem.com">Collagenase - Worthington Biochemical Price List (worthington-biochem.com)</a>
Phosphatase inhibitor cocktail (PhosSTOP tablets)	#49068370001, Roche Diagnostics	<a href="http://www.sigmaaldrich.com">PhosSTOP™ (sigmaaldrich.com)</a>
Protease inhibitor cocktail (Complete Mini EDTA-free tablets)	#1183617001, Roche Diagnostics	<a href="http://www.sigmaaldrich.com">cOmplete™, Mini, EDTA-free Protease Inhibitor Cocktail Protease Inhibitor Cocktail Tablets provided in a glass vial, Tablets provided in a glass vial (sigmaaldrich.com)</a>
Restore™ Western Blot Stripping Buffer	#21059, Thermo Scientific	<a href="http://www.thermofisher.com">Restore™ Western Blot Stripping Buffer (thermofisher.com)</a>
Gelatin	#G9391, Sigma-Aldrich	<a href="http://www.sigmaaldrich.com">Gelatin from bovine skin Type B, powder, BioReagent, suitable for cell culture   9000-70-8 (sigmaaldrich.com)</a>
Fibronectin	#F1441, Sigma-Aldrich	<a href="http://www.sigmaaldrich.com">Fibronectin bovine plasma solution, sterile-filtered, BioReagent, suitable for cell culture (sigmaaldrich.com)</a>
DMEM	#D1152, Sigma-Aldrich	<a href="http://www.sigmaaldrich.com">Dulbecco's Modified Eagle's Medium - high glucose HEPES Modification, With 4500 mg/L glucose, L-glutamine, and 25 mM HEPES, without sodium bicarbonate and pyruvate, powder, suitable for cell culture (sigmaaldrich.com)</a>
M-199	#M2520, Sigma-Aldrich	<a href="http://www.sigmaaldrich.com">M2520   Sigma-Aldrich (sigmaaldrich.com)</a>
Horse serum	#14403E, BioWhittaker	Discontinued
Bovine serum	#14-701F, BioWhittaker	Discontinued
Fluo-4 AM	#F14201, Molecular Probes	<a href="http://www.thermofisher.com">Fluo-4, AM, cell permeant (thermofisher.com)</a>
Alexa Fluor 680 conjugated goat-anti-mouse	#A32729, Thermo Fisher Scientific	<a href="http://www.thermofisher.com">Goat anti-Mouse IgG (H+L) Highly Cross-Adsorbed, Alexa Fluor® Plus 680 (A32729) (thermofisher.com)</a>
Alexa Fluor 546 conjugated donkey anti-Rabbit	#A10040, Thermo Fisher Scientific	<a href="http://www.thermofisher.com">Donkey anti-Rabbit IgG (H+L) Highly Cross-Adsorbed, Alexa Fluor® 546 (A10040) (thermofisher.com)</a>
Alexa Fluor 488 conjugated wheat germ agglutinin	#W11261, Thermo Fisher Scientific	<a href="http://www.thermofisher.com">Wheat Germ Agglutinin, Alexa Fluor™ 488 Conjugate (thermofisher.com)</a>
SlowFade Diamond Antifade Mountant	#S36963, Thermo Fisher Scientific	<a href="http://www.thermofisher.com">SlowFade™ Diamond Antifade Mountant (thermofisher.com)</a>
Duolink® Proximity Ligation Assay (PLA)	#DUO92101-1KT, Sigma-Aldrich	<a href="http://www.sigmaaldrich.com">Duolink® In Situ Red Starter Kit Mouse/Rabbit (sigmaaldrich.com)</a>
CaM	#C4874, Sigma-Aldrich	<a href="http://www.sigmaaldrich.com">C4874   Sigma-Aldrich (sigmaaldrich.com)</a>
Ultra TMB solution	#34028, Thermo Fisher Scientific	<a href="http://www.thermofisher.com">1-Step™ Ultra TMB-ELISA Substrate Solution (thermofisher.com)</a>
DMEM	#41965039, Thermo Fisher Scientific	<a href="http://www.thermofisher.com">DMEM, high glucose (thermofisher.com)</a>
1 % non-essential amino acids	#10370-021, Thermo Fisher Scientific	<a href="http://www.thermofisher.com">MEM, NEAA, no glutamine (thermofisher.com)</a>
Penicillin/streptomycin	#P4333, Sigma-Aldrich	<a href="http://www.sigmaaldrich.com">Penicillin-Streptomycin Solution stabilized, with 10,000 units penicillin and 10 mg streptomycin/mL, 0.1 µm filtered,</a>

		<a href="#">BioReagent, suitable for cell culture (sigmaaldrich.com)</a>
Lipofectamine 2000	#11668-019, Thermo Fischer Scientific	<a href="#">Lipofectamine™ 2000 Transfection Reagent (thermofisher.com)</a>
Recombinant His-CaMKIIδ-T287D, His-CaMKIIδ-T287A, His-CaMKIIδ-T287D (1-74), His-CaMKIIδ (1-282), GST-AKAP18δ (201-301) and GST	Genscript (custom made)	Not available
Active His-CaMKIIδ	# PV3373, Thermo Fischer Scientific	<a href="#">CAMK2D (CaMKII Delta) Recombinant Human Protein (thermofisher.com)</a>
CaM	#14-368, Merck Millipore	<a href="#">Calmodulin Protein, 100 µg   14-368A (merckmillipore.com)</a>
Whatman P81 phosphocellulose chromatography paper	#3698-915, Fisher Scientific	Discontinued
SA chips	#BR100032, Cytiva	<a href="#">Sensor Chip SA   Cytiva (cytivalifesciences.com)</a>
1 x Biacore running buffer	#BR100826, Cytiva	<a href="#">HBS-EP+ Buffer 10×   Cytiva (cytivalifesciences.com)</a>
CaM agarose	#A6112, Sigma Aldrich	<a href="#">Calmodulin-Agarose saline suspension (sigmaaldrich.com)</a>
Cytotoxicity detection kit (LDH)	#11-644-793-001, Roche Diagnostics	<a href="#">Cytotoxicity Detection Kit (LDH) (sigmaaldrich.com)</a>
PLUS A/G agarose beads	Sc-2003, Santa Cruz	<a href="#">Protein A/G PLUS-Agarose   SCBT - Santa Cruz Biotechnology</a>