

DATASHEET

Phospholamban (Phospho-S16/T17) Rabbit Polyclonal Antibody

CAT. NO. APA09453

KEY FEATURES

Target	Phospholamban (Phospho-S16/T17)	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat, Bovine, Dog, Pig, Rabbit	Clonality	Polyclonal
Applications	WB, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

BACKGROUND

Reversibly inhibits the activity of ATP2A2/SERCA2 in cardiac sarcoplasmic reticulum by decreasing the apparent affinity of the ATPase for Ca(2+) . Binds preferentially to the ATP-bound E1 conformational form of ATP2A2 which predominates at low Ca(2+) concentrations during the diastolic phase of the cardiac cycle . Inhibits ATP2A2 Ca(2+) affinity by disrupting its allosteric activation by ATP . Modulates the contractility of the heart muscle in response to physiological stimuli via its effects on ATP2A2. Modulates calcium re-uptake during muscle relaxation and plays an important role in calcium homeostasis in the heart muscle. The degree of ATP2A2 inhibition depends on the oligomeric state of PLN. ATP2A2 inhibition is alleviated by PLN phosphorylation .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IF/ICC	1:100 - 1:500

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to Phospholamban (Phospho-S16/T17)
Specificity	Recognizes endogenous levels of Phospholamban protein only when phosphorylated at S16/T17.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding S16/T17 of human Phospholamban protein. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 6 kD; Observed: 6 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	PLB; Cardiac phospholamban; PLB
Gene Symbol	PLN
Entrez Gene	5350(Human); 18821(Mouse); 64672(Rat)
SwissProt	P26678(Human); P61014(Mouse); P61016(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

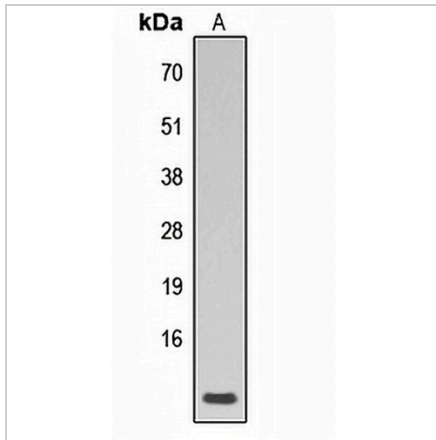
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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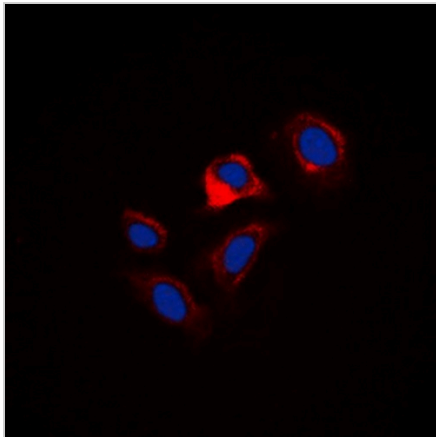
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Western blot analysis of Phospholamban (Phospho-S16/T17) expression in human heart (A) whole cell lysates. (Predicted band size: 6 kD; Observed band size: 6 kD)



Immunofluorescent analysis of Phospholamban (Phospho-S16/T17) staining in HuvEc cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.