

DATASHEET

Phospholamban Rabbit Polyclonal Antibody

CAT. NO. APA19118

KEY FEATURES

Target	Phospholamban	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IHC, FC	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
IHC	1:50 - 1:200
FC	1:10 - 1:50

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

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to Phospholamban
Specificity	Recognizes endogenous levels of Phospholamban protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the N-terminal region of human Phospholamban. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 6 kD; Observed: 12 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.

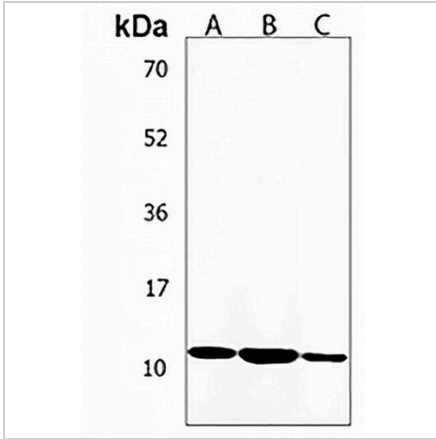
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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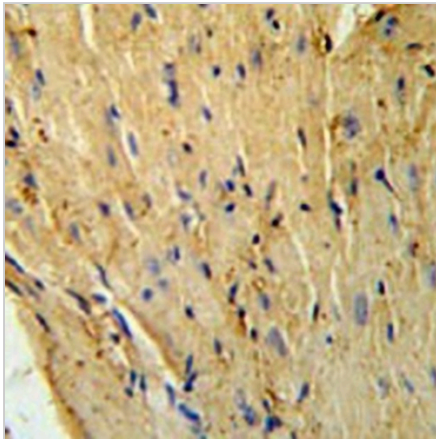
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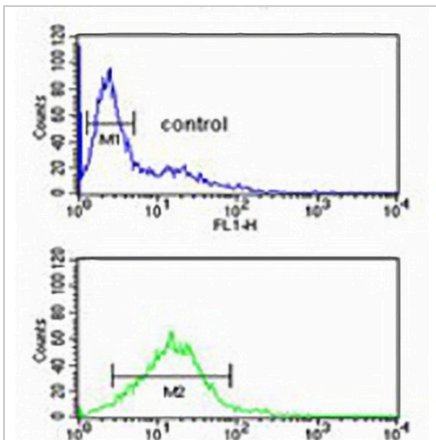
DATA



Western blot analysis of Phospholamban expression in human heart (A), mouse heart (B), rat heart (C) whole cell lysates. (Predicted band size: 6 kD; Observed band size: 12 kD)



Immunohistochemical analysis of Phospholamban staining in mouse heart formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Flow cytometric analysis of A375 cells using Anti-Phospholamban Antibody. The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody at 37 °C for 60 min. The secondary antibody Goat Anti-Rabbit IgG (H&L) - AREX® Fluor 488 was incubated at 37 °C for 40 min. Isotype control antibody (blue line) was used under the same condition.

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.