





Anti-Phospholamban (phospho S16) antibody ab15000

★★★★★ [11 Abreviews](#) [33 References](#) [1 Image](#)

Overview

Product name	Anti-Phospholamban (phospho S16) antibody
Description	Rabbit polyclonal to Phospholamban (phospho S16)
Host species	Rabbit
Specificity	Multiple bands can be observed in addition to the 25kD pentamer for PLB. Monomeric, dimeric, trimeric forms, etc. can be observed if the preparations are boiled before SDS-PAGE. This antibody also can display non-specific bands at 75 and 100kD in some lysate preparations. Note: Do not boil cardiac preparation. Boiling may reduce the 25kD pentamer in to tri-, di- or monomers. In addition, phosphorylation may disrupt the pentamer into dimers and monomers.
Tested applications	Suitable for: IHC-Fr, IHC-P, WB
Species reactivity	Reacts with: Mouse, Rat, Rabbit, Hamster, Cow, Human, Pig, Chinese hamster Predicted to work with: Dog 
Immunogen	Synthetic peptide corresponding to Human Phospholamban aa 1-100 (phospho S16) conjugated to keyhole limpet haemocyanin.  Run BLAST with  Run BLAST with 
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: 0.05% Sodium azide Constituents: 0.368% Tris glycine, 30% Glycerol, 0.87% Sodium chloride
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab15000 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-Fr	★★★★★ (1)	Use at an assay dependent concentration.
IHC-P	★★★★★ (1)	Use at an assay dependent concentration.
WB	★★★★★ (8)	Use a concentration of 0.5 - 2 µg/ml. Predicted molecular weight: 6.24 kDa.

Target

Function

Reversibly inhibits the activity of ATP2A2 in cardiac sarcoplasmic reticulum by decreasing the apparent affinity of the ATPase for Ca(2+). 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.

Tissue specificity

Heart muscle (at protein level).

Involvement in disease

Cardiomyopathy, dilated 1P
Cardiomyopathy, familial hypertrophic 18

Sequence similarities

Belongs to the phospholamban family.

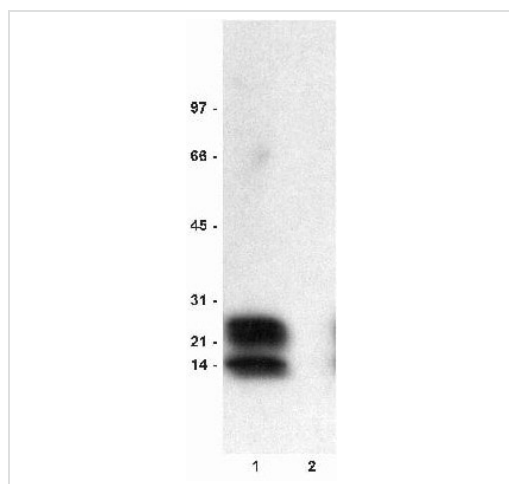
Post-translational modifications

Phosphorylation by PKA abolishes the inhibition of ATP2A2-mediated calcium uptake. Phosphorylated at Thr-17 by CaMK2, and in response to beta-adrenergic stimulation. Phosphorylation by DMPK may stimulate sarcoplasmic reticulum calcium uptake in cardiomyocytes.

Cellular localization

Endoplasmic reticulum membrane. Sarcoplasmic reticulum membrane. Mitochondrion membrane. Membrane. Colocalizes with HAX1 at the endoplasmic reticulum (PubMed:17241641). Colocalizes with DMPK at the sarcoplasmic reticulum (PubMed:15598648).

Images



Western blot - Anti-Phospholamban (phospho S16)
antibody (ab15000)

All lanes : Anti-Phospholamban (phospho S16) antibody
(ab15000) at 0.5 µg/ml

Lane 1 : Bovine cardiac preparation treated with PKA

Lane 2 : Untreated bovine cardiac preparation

Predicted band size: 6.24 kDa

Additional bands at: 14 kDa (possible multimer), 23 kDa
(possible multimer)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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