


# Anti-Phospholamban antibody ab126174

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

### Overview

<b>Product name</b>	Anti-Phospholamban antibody
<b>Description</b>	Rabbit polyclonal to Phospholamban
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse <b>Predicted to work with:</b> Rat, Rabbit, Cow, Dog, Human, Pig 
<b>Immunogen</b>	Recombinant fragment, corresponding to a region within amino acids 1-11 of Human Phospholamban (UniProt P26678).
<b>Positive control</b>	Mouse heart whole cell lysate
<b>General notes</b>	<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&amp;As</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	<p>pH: 7.00</p> <p>Preservative: 0.01% Thimerosal (merthiolate)</p> <p>Constituents: 78.99% PBS, 1% BSA, 20% Glycerol (glycerin, glycerine)</p>
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab126174 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
WB		1/1000 - 1/10000. Predicted molecular weight: 6 kDa.

## Target

### Function

Reversibly inhibits the activity of ATP2A2 in cardiac sarcoplasmic reticulum by decreasing the apparent affinity of the ATPase for  $\text{Ca}^{2+}$ . 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.

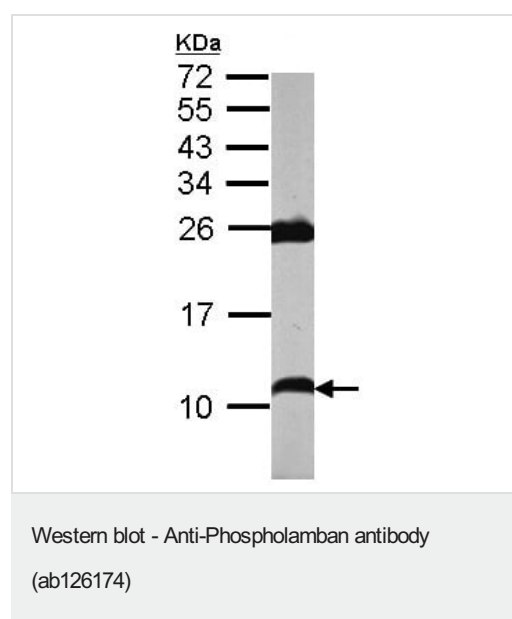
### Post-translational modifications

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 a the sarcoplasmic reticulum (PubMed:15598648).

## Images



Anti-Phospholamban antibody (ab126174) at 1/5000 dilution +  
Mouse heart whole cell lysate at 50 µg

**Predicted band size:** 6 kDa

15% SDS PAGE

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

### **Our Abpromise to you: Quality guaranteed and expert technical support**

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