

Product datasheet

Recombinant Human Phospholamban protein
ab114227

1 Image

Description

Product name	Recombinant Human Phospholamban protein	
Expression system	Wheat germ	
Accession	P26678	
Protein length	Protein fragment	
Animal free	No	
Nature	Recombinant	
Species	Human	
Sequence	MEKVQYLTRSAIRRASTIEMPQQARQKLQN	
Predicted molecular weight	29 kDa including tags	
Amino acids	1 to 30	
Tags	GST tag N-Terminus	

Specifications

Our [Abpromise guarantee](#) covers the use of **ab114227** in the following tested applications.

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

Applications	ELISA
	SDS-PAGE
	Western blot
Form	Liquid
Additional notes	Protein concentration is above or equal to 0.05 mg/mL.

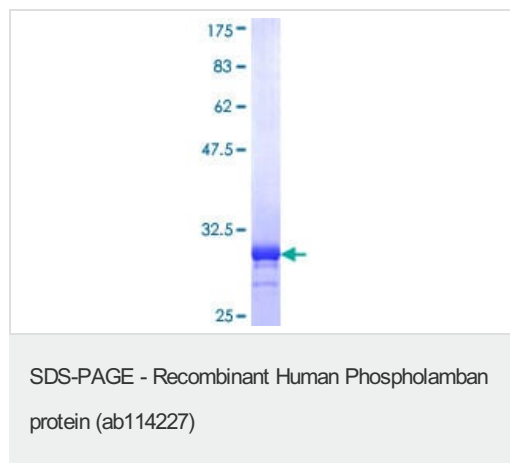
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.3% Glutathione, 0.79% Tris HCl
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General Info

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



ab114227 analysed on a 12.5% SDS-PAGE gel stained with Coomassie Blue.

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