abcam

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.

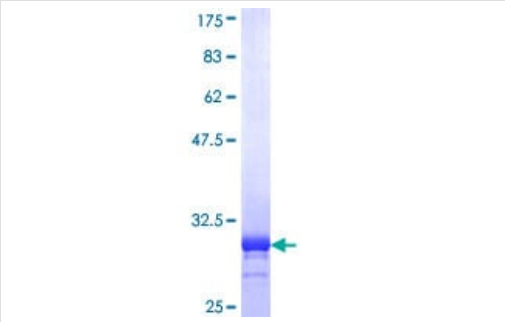
Preparation and Storage

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

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 a the sarcoplasmic reticulum (PubMed:15598648).

Images



SDS-PAGE - Recombinant Human Phospholamban protein (ab114227)

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

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