abcam

Product datasheet

Anti-Phospholamban (phospho S16) antibody [EPR1911] ab92697

Recombinant RabMAb

2 References 2 Images

Overview

Product name Anti-Phospholamban (phospho S16) antibody [EPR1911]

Description Rabbit monoclonal [EPR1911] to Phospholamban (phospho S16)

Host species Rabbit

Tested applications Suitable for: WB

Unsuitable for: IHC-P

Species reactivity Reacts with: Human

Predicted to work with: Mouse

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control Fetal heart lysate

General notesThis product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information **see here**.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Rat: We have preliminary internal testing data to indicate this antibody may not react with this

species. Please contact us for more information.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

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Purity Tissue culture supernatant

Purification notesThis antibody is not purified. It is provided in cell supernatant and storage buffer.

Clonality Monoclonal

Clone number EPR1911

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab92697 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		

Application notes IP: 1/50.

WB: 1/200,000 - 1/500,000. Detects a band of approximately 11 kDa (predicted molecular

weight: 6 kDa).

Is unsuitable for IHC-P.

Not yet tested in other applications.

Optimal dilutions/concentrations should be determined by the end user.

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 similaritiesBelongs to the phospholamban family.

Post-translational Phosphorylation by PKA abolishes the inhibition of ATP2A2-mediated calcium uptake. **modifications** Phosphorylated at Thr-17 by CaMK2, and in response to beta-adrenergic stimulation.

Phosphorylation by DMPK may stimulate sarcoplasmic reticulum calcium uptake in

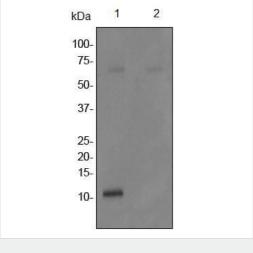
cardiomyocytes.

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



Western blot - Anti-Phospholamban (phospho S16) antibody [EPR1911] (ab92697)

All lanes : Anti-Phospholamban (phospho S16) antibody [EPR1911] (ab92697) at 1/200000 dilution

Lane 1: Fetal heart lysate (untreated)

Lane 2 : Fetal heart lysate (treated with LP)

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: HRP labelled Goat anti-Rabbit antibody at 1/2000

dilution

Predicted band size: 6 kDa

Actual band size is 11 KDa.



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