abcam

Product datasheet

Anti-Phospholamban (phospho S16) antibody [EPR1911] - BSA and Azide free ab247592

Recombinant

RabMAb

2 Images

Overview

Immunogen

Product name Anti-Phospholamban (phospho S16) antibody [EPR1911] - BSA and Azide free

DescriptionRabbit monoclonal [EPR1911] to Phospholamban (phospho S16) - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB

Unsuitable for: IHC-P

Species reactivity Reacts with: Human

Predicted to work with: Mouse

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

General notes ab247592 is the carrier-free version of <u>ab92697</u>.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This 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**.

1

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 +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR1911

Isotype IgG

Applications

The Abpromise quarantee Our Abpromise quarantee covers the use of ab247592 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		Use at an assay dependent concentration. Detects a band of approximately 11 kDa (predicted molecular weight: 6 kDa).

Application notes Is unsuitable for IHC-P.

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 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.

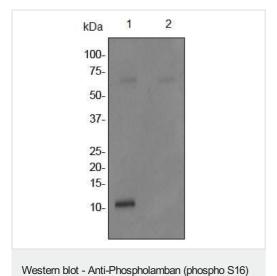
Phosphorylated at Thr-17 by CaMK2, and in response to beta-adrenergic stimulation. Phosphorylation by DMPK may stimulate sarcoplasmic reticulum calcium uptake in

cardiomyocytes.

Cellular localization Endoplasmic reticulum membrane. Sarcoplasmic reticulum membrane. Mitochondrion

membrane. Membrane. Colocalizes with HAX1 at the endoplasmic reticulum

Images



antibody [EPR1911] - BSA and Azide free

(ab247592)

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.

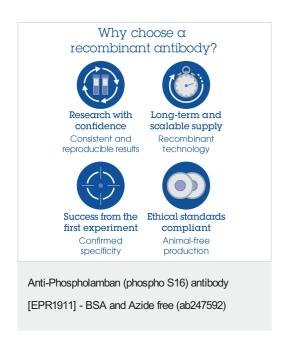
Secondary

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

Predicted band size: 6 kDa

This data was developed using <u>ab92697</u>, the same antibody clone in a different buffer formulation.

Actual band size is 11 KDa.



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

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- Extensive multi-media technical resources to help you
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