# abcam

### Product datasheet

## Anti-CSRP3 antibody [EPR12616(B)] ab173301

Recombinant RabMAb

#### 2 References 4 Images

#### Overview

**Product name** Anti-CSRP3 antibody [EPR12616(B)]

**Description** Rabbit monoclonal [EPR12616(B)] to CSRP3

**Host species** Rabbit

Suitable for: WB, IHC-P **Tested applications** 

Unsuitable for: ICC/IF or IP

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

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

Positive control fetal heart and fetal muscle lysates, Human heart and Human skeletal muscle tissues

**General notes** 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**.

#### **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

**Purity** Protein A purified

Clonality Monoclonal

Clone number EPR12616(B)

**Isotype** IgG

#### **Applications**

#### The Abpromise guarantee

Our Abpromise quarantee covers the use of ab173301 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. Detects a band of approximately 20 kDa (predicted molecular weight: 21 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

**Application notes** 

Is unsuitable for ICC/IF or IP.

#### **Target**

**Function** 

Positive regulator of myogenesis. Plays a crucial and specific role in the organization of cytosolic structures in cardiomyocytes. Could play a role in mechanical stretch sensing. May be a scaffold protein that promotes the assembly of interacting proteins at Z-line structures. It is essential for calcineurin anchorage to the Z line. Required for stress-induced calcineurin-NFAT activation.

Tissue specificity

Cardiac and slow-twitch skeletal muscles.

Involvement in disease

Defects in CSRP3 are the cause of cardiomyopathy dilated type 1M (CMD1M) [MIM:607482]. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death

Defects in CSRP3 are the cause of cardiomyopathy familial hypertrophic type 12 (CMH12) [MIM:612124]. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked by exercise. The disorder has inter- and intrafamilial variability ranging from benign to malignant forms with high risk of cardiac failure and sudden cardiac death.

Sequence similarities

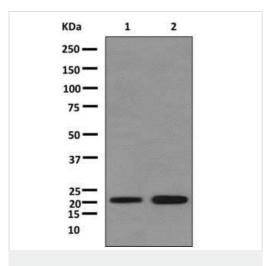
Contains 2 LIM zinc-binding domains.

Cellular localization

Nucleus. Cytoplasm. Cytoplasm > cytoskeleton. Cytoplasm > myofibril > sarcomere > Z line. Mainly cytoplasmic (By similarity). In the nucleus it associates with the actin cytoskeleton

(Potential). In the Z line, found associated with GLRX3.

#### **Images**



Western blot - Anti-CSRP3 antibody [EPR12616(B)] (ab173301)

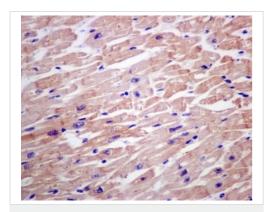
**All lanes :** Anti-CSRP3 antibody [EPR12616(B)] (ab173301) at 1/1000 dilution

Lane 1 : Fetal heart tissue lysate

Lane 2 : fetal muscle tissue lysate

Lysates/proteins at 10 µg per lane.

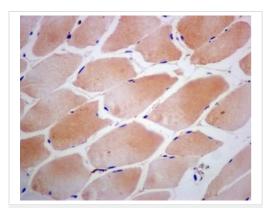
Predicted band size: 21 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CSRP3 antibody
[EPR12616(B)] (ab173301)

Immunohistochemical analysis of paraffin embedded Human heart tissue labeling CSRP3 with ab173301 at 1/100.

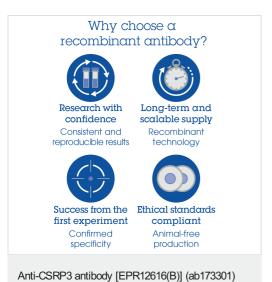
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CSRP3 antibody
[EPR12616(B)] (ab173301)

Immunohistochemical analysis of paraffin embedded Human skeletal muscle tissue labeling CSRP3 with ab173301 at 1/100.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



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

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

•	Guarantee only valid for products bought direct from Abcam or one of our authorized distributors				
		5			