

# Anti-Sarcomeric Alpha Actinin antibody [EP2529Y] - BSA and Azide free ab220817

Recombinant **RabMAb**

[6 References](#) [5 Images](#)

## Overview

<b>Product name</b>	Anti-Sarcomeric Alpha Actinin antibody [EP2529Y] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EP2529Y] to Sarcomeric Alpha Actinin - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, IP, WB <b>Unsuitable for:</b> Flow Cyt or ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Human skeletal muscle and fetal heart, mouse, rat and human heart and rat brain tissue lysates IHC-P: Human and mouse cardiac muscle tissues.
<b>General notes</b>	<p>ab220817 is the carrier-free version of <a href="#">ab68167</a>.</p> <p>Our <b>carrier-free</b> 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.</p> <p>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.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EP2529Y
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab220817 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
<b>IHC-P</b>		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <b>IHC antigen retrieval protocols</b> .
<b>IP</b>		Use at an assay dependent concentration.
<b>WB</b>		Use at an assay dependent concentration. Detects a band of approximately 103 kDa (predicted molecular weight: 103 kDa).

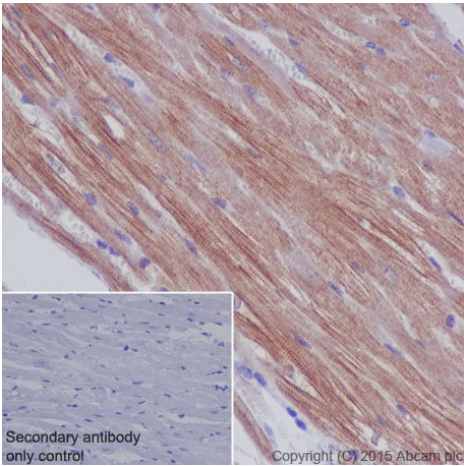
**Application notes** Is unsuitable for Flow Cyt or ICC/IF.

## Target

<b>Function</b>	F-actin cross-linking protein which is thought to anchor actin to a variety of intracellular structures. This is a bundling protein.
<b>Tissue specificity</b>	Expressed in both skeletal and cardiac muscle.
<b>Involvement in disease</b>	Defects in ACTN2 are the cause of cardiomyopathy dilated type 1AA (CMD1AA) [MIM:612158]. 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.
<b>Sequence similarities</b>	Belongs to the alpha-actinin family. Contains 1 actin-binding domain. Contains 2 CH (calponin-homology) domains. Contains 2 EF-hand domains. Contains 4 spectrin repeats.

<b>Cellular localization</b>	Cytoplasm > myofibril > sarcomere > Z line. Colocalizes with MYOZ1 and FLNC at the Z-lines of skeletal muscle.
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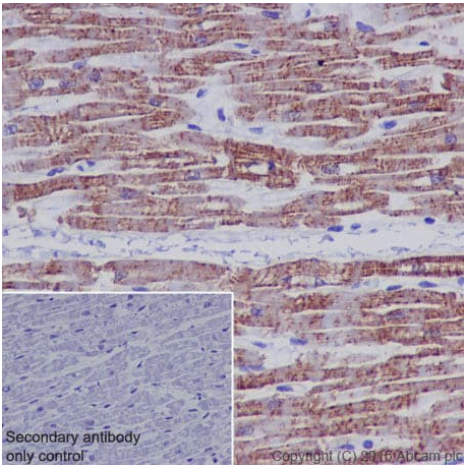
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Sarcomeric Alpha Actinin antibody [EP2529Y] - BSA and Azide free (ab220817)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse cardiac muscle tissue labelling Sarcomeric Alpha Actinin with purified **ab68167** at 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. **ab97051**, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

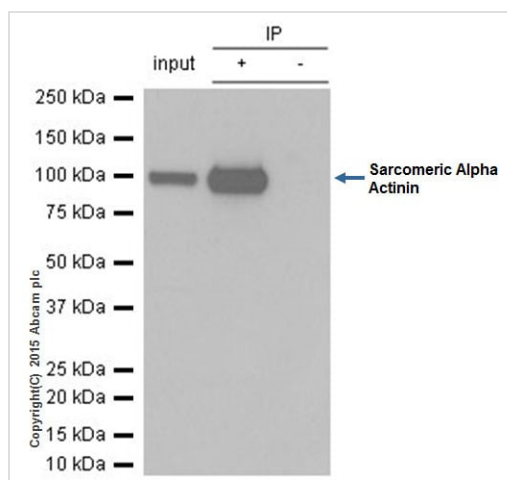
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab68167**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Sarcomeric Alpha Actinin antibody [EP2529Y] - BSA and Azide free (ab220817)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cardiac muscle tissue labelling Sarcomeric Alpha Actinin with purified **ab68167** at 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. **ab97051**, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab68167**).



Immunoprecipitation - Anti-Sarcomeric Alpha Actinin antibody [EP2529Y] - BSA and Azide free (ab220817)

**ab68167** (purified) at 1/20 immunoprecipitating Sarcomeric Alpha Actinin in HepG2 whole cell lysate.

Lane 1 (input): HepG2 whole cell lysate (10µg)

Lane 2 (+): **ab68167** + HepG2 whole cell lysate.

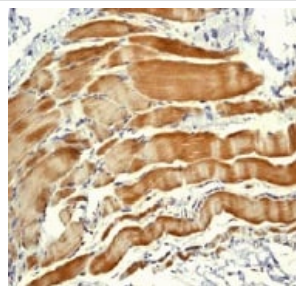
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of **ab68167** in HepG2 whole cell lysate.

For western blotting, **ab131366** VeriBlot for IP (HRP) was used for detection at 1/1000 dilution.

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab68167**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Sarcomeric Alpha Actinin antibody [EP2529Y] - BSA and Azide free (ab220817)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human muscle tissue labelling Sarcomeric Alpha Actin with unpurified **ab68167** at a dilution of 1/100.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab68167**).

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

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

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