

Anti-alpha Actinin/ACTN1 antibody [EP2527Y] - BSA and Azide free ab239858

KO VALIDATED

Recombinant

RabMAb

4 Images

Overview

Product name	Anti-alpha Actinin/ACTN1 antibody [EP2527Y] - BSA and Azide free
Description	Rabbit monoclonal [EP2527Y] to alpha Actinin/ACTN1 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, IP, WB Unsuitable for: IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: PC-12, C6, NIH/3T3, and HeLa cell lysates; IP: NIH/3T3 cells.
General notes	<p>ab239858 is the carrier-free version of ab68194.</p> <p>Our carrier-free 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 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.</p> <p>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.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

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	EP2527Y
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab239858 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

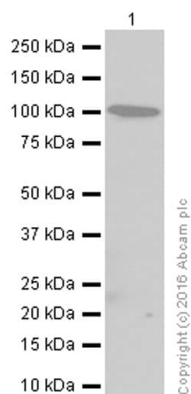
Application	Abreviews	Notes
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 103 kDa (predicted molecular weight: 103 kDa).

Application notes Is unsuitable for IHC-P.

Target

Function	F-actin cross-linking protein which is thought to anchor actin to a variety of intracellular structures. This is a bundling protein.
Sequence similarities	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.
Cellular localization	Cytoplasm > cytoskeleton. Cytoplasm > myofibril > sarcomere > Z line. Colocalizes with MYOZ2 and PPP3CA at the Z-line of heart and skeletal muscle.

Images



Western blot - Anti-alpha Actinin/ACTN1 antibody [EP2527Y] - BSA and Azide free (ab239858)

Anti-alpha Actinin/ACTN1 antibody [EP2527Y] (**ab68194**) at 1/10000 dilution (Purified) + HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate at 15 µg

Secondary

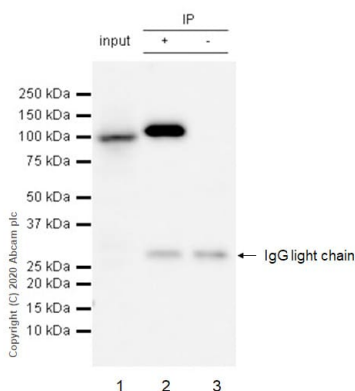
Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution

Predicted band size: 103 kDa

Observed band size: 103 kDa

This data was developed using **ab68194**, the same antibody clone in a different buffer formulation.

Blocking buffer: 5% NFDM/TBST



Immunoprecipitation - Anti-alpha Actinin/ACTN1 antibody [EP2527Y] - BSA and Azide free (ab239858)

Purified **ab68194** at 1:20 dilution (2µg) immunoprecipitating alpha Actinin/ACTN1 in NIH/3T3 whole cell lysate.

Lane 1 (input): NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate 10µg

Lane 2 (+): **ab68194** + NIH/3T3 whole cell lysate.

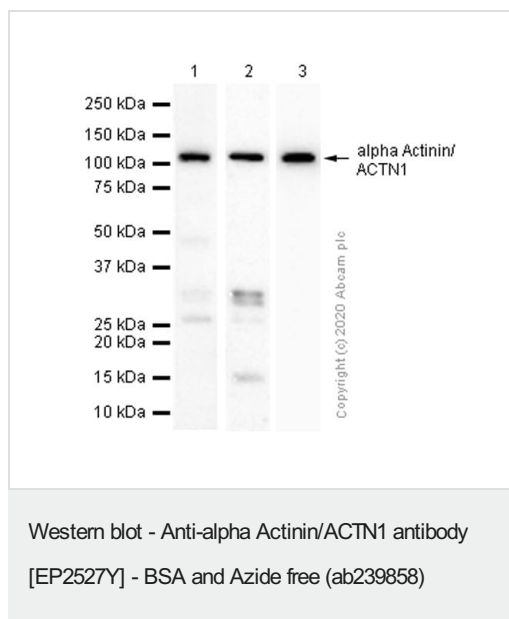
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of **ab68194** in NIH/3T3 whole cell lysate.

VeriBlot for IP Detection Reagent (HRP)(**ab131366**) (1:5000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM/TBST.

Observed band size: 103 kDa



All lanes : Anti-alpha Actinin/ACTN1 antibody [EP2527Y] ([ab68194](#)) at 1/1000 dilution (Purified)

Lane 1 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate at 20 µg

Lane 2 : C6 (Rat glial tumor glial cell) whole cell lysate at 15 µg

Lane 3 : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate at 15 µg

Secondary

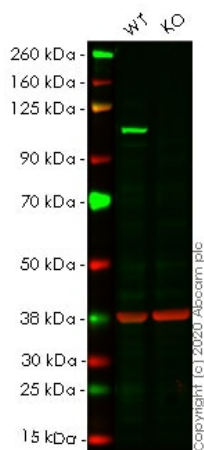
All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 103 kDa

Observed band size: 103 kDa

This data was developed using [ab68194](#), the same antibody clone in a different buffer formulation.

Blocking buffer: 5% NFDM/TBST



Western blot - Anti-alpha Actinin/ACTN1 antibody [EP2527Y] - BSA and Azide free (ab239858)

All lanes : Anti-alpha Actinin/ACTN1 antibody [EP2527Y] ([ab68194](#)) at 1/2000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : ACTN1 knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 103 kDa

Observed band size: 103 kDa

This data was developed using the same antibody clone in a different buffer formulation ([ab68194](#)).

Lanes 1-2: Merged signal (red and green). Green - [ab68194](#) observed at 103 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) observed at 37 kDa.

[ab68194](#) was shown to react with alpha Actinin/ACTN1 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line [ab265610](#) (knockout cell lysate [ab257337](#)) was used. Wild-type HeLa and ACTN1 knockout HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. [ab68194](#) and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated overnight at 4°C at a 1 in 2000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye®800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye®680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

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

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