

Product datasheet

Anti-alpha Actinin/ACTN1 antibody [EP2528Y] - BSA and Azide free ab185204

KO VALIDATED Recombinant RabMAb

6 Images

Overview

Product name	Anti-alpha Actinin/ACTN1 antibody [EP2528Y] - BSA and Azide free
Description	Rabbit monoclonal [EP2528Y] to alpha Actinin/ACTN1 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: WB Unsuitable for: Flow Cyt, ICC/IF or IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HAP1, A431, NIH 3T3, C2C12, C6 and A673 cell lysates and human skeletal muscle and human heart tissue lysates.
General notes	<p>ab185204 is the carrier-free version of ab81265.</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</p>

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. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP2528Y
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab185204 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

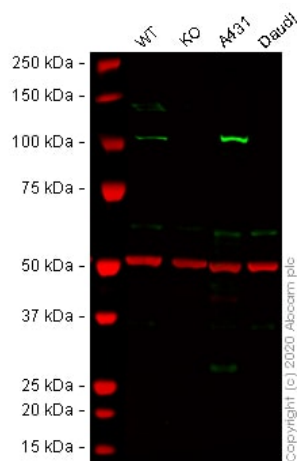
Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 103 kDa (predicted molecular weight: 103 kDa).

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

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 [EP2528Y] - BSA and Azide free (ab185204)

All lanes : Anti-alpha Actinin/ACTN1 antibody [EP2528Y] ([ab81265](#)) at 1/1000 dilution

Lane 1 : Wild-type HAP1 cell lysate

Lane 2 : ACTN1 knockout HAP1 cell lysate

Lane 3 : A431 cell lysate

Lane 4 : Daudi cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

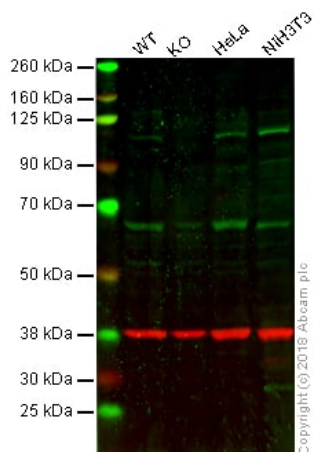
Predicted band size: 103 kDa

Observed band size: 115 kDa

This data was developed using the same antibody clone in a different buffer formulation ([ab81265](#)).

Lanes 1 - 4: Merged signal (red and green). Green - [ab81265](#) observed at 115 kDa. Red - loading control [ab7291](#) (Mouse anti-Alpha Tubulin [DM1A]) observed at 55kDa.

[ab81265](#) was shown to react with ACTN1 in wild-type HAP1 cells in western blot with loss of signal observed in ACTN1 knockout sample. Wild-type and ACTN1 knockout HAP1 cell lysates were subjected to SDS-PAGE. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with [ab81265](#) and [ab7291](#) (Mouse anti-Alpha Tubulin [DM1A]) overnight at 4°C at a 1 in 1000 Dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-alpha Actinin/ACTN1 antibody [EP2528Y] - BSA and Azide free (ab185204)

This data was developed using **ab81265**, the same antibody clone in a different buffer formulation.

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

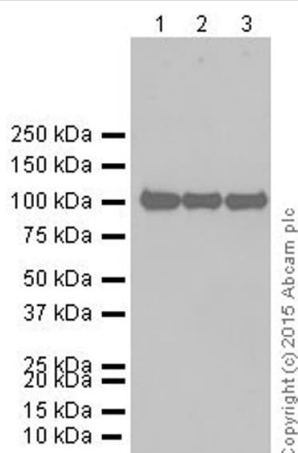
Lane 2: Alpha Actinin knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

Lane 4: NIH 3T3 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - **ab81265** observed at 103 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

ab81265 was shown to recognize alpha Actinin in wild-type HAP1 cells as signal was lost at the expected MW in alpha Actinin knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and alpha Actinin knockout samples were subjected to SDS-PAGE. **ab81265** and **ab9484** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/500 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-alpha Actinin/ACTN1 antibody [EP2528Y] - BSA and Azide free (ab185204)

All lanes : Anti-alpha Actinin/ACTN1 antibody [EP2528Y] (**ab81265**) at 1/1000 dilution (purified)

Lane 1 : NIH/3T3 whole cell lysate

Lane 2 : C2C12 whole cell lysate

Lane 3 : C6 whole cell lysate

Lysates/proteins at 20 µg per lane.

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 [ab81265](#), the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDm/TBST.

Anti-alpha Actinin/ACTN1 antibody [EP2528Y] ([ab81265](#)) at 1/1000 dilution (purified) + A673 whole cell lysate at 20 µg

Secondary

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 [ab81265](#), the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDm/TBST.

All lanes : Anti-alpha Actinin/ACTN1 antibody [EP2528Y] ([ab81265](#)) at 1/1000 dilution (unpurified)

Lane 1 : NIH 3T3 cell lysate

Lane 2 : human skeletal muscle tissue lysate

Lane 3 : human heart tissue lysate

Lysates/proteins at 10 µg per lane.

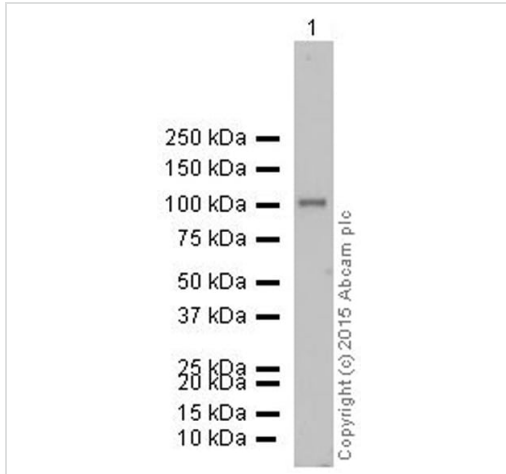
Secondary

All lanes : HRP-conjugated goat anti-rabbit IgG at 1/2000 dilution

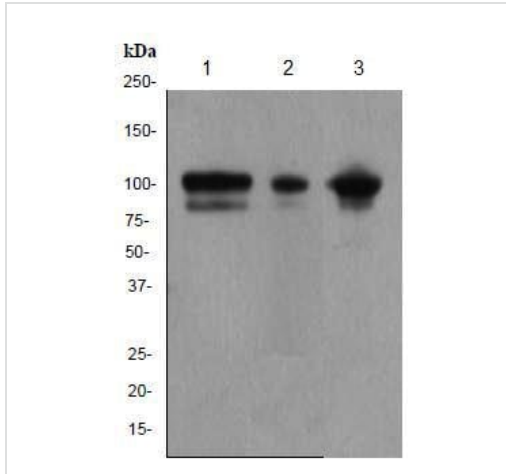
Predicted band size: 103 kDa

Observed band size: 103 kDa

This data was developed using [ab81265](#), the same antibody clone in a different buffer formulation.



Western blot - Anti-alpha Actinin/ACTN1 antibody [EP2528Y] - BSA and Azide free (ab185204)



Western blot - Anti-alpha Actinin/ACTN1 antibody [EP2528Y] - BSA and Azide free (ab185204)

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

Anti-alpha Actinin/ACTN1 antibody [EP2528Y] -
BSA and Azide free (ab185204)

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

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