

Product datasheet

Anti-alpha Actinin/ACTN1 antibody [OTI7A4] ab90421

10 Images

Overview

Product name	Anti-alpha Actinin/ACTN1 antibody [OTI7A4]
Description	Mouse monoclonal [OTI7A4] to alpha Actinin/ACTN1
Host species	Mouse
Tested applications	Suitable for: WB, ICC/IF, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human, African green monkey
Immunogen	Recombinant fragment corresponding to Human alpha Actinin/ACTN1 aa 650-893. Protein produced in E.coli. Database link: NP_001093
Positive control	ICC/IF: HeLa cells transiently transfected by pCMV6-ENTRY alpha Actinin/ACTN1. HeLa cells. WB: HEK-293T cell transient overexpression lysate, HepG, NIH/3T3, HeLa, SVT2, A549, COS-7, Jurkat, PC-12, and MCF7 cell extracts. Mouse spleen tissue extracts. IHC-P: Human breast, kidney, liver, ovary and bladder tissue.
General notes	The clone number has been updated from 7A4 to OTI7A4, both clone numbers name the same clone. This product was previously labelled as alpha Actinin

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions,

special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

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. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: PBS, 1% BSA, 50% Glycerol
Purity	Affinity purified
Purification notes	Purified from cell culture supernatant by affinity chromatography
Clonality	Monoclonal
Clone number	OT17A4
Isotype	IgG2a

Applications

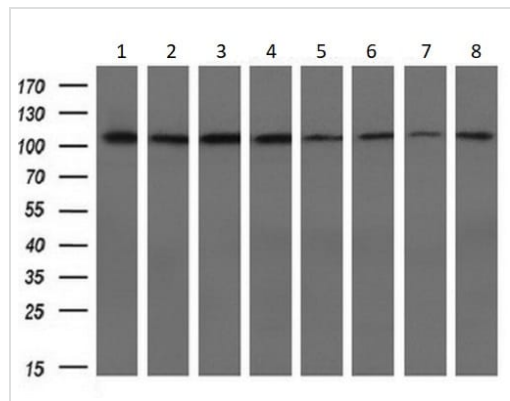
Our [Abpromise guarantee](#) covers the use of **ab90421** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/200 - 1/2000. Predicted molecular weight: 103 kDa.
ICC/IF		1/100.
IHC-P		1/50. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

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.



Western blot - Anti-alpha Actinin/ACTN1 antibody [OTI7A4] (ab90421)

All lanes : Anti-alpha Actinin/ACTN1 antibody [OTI7A4] (ab90421) at 1/200 dilution

Lane 1 : HepG2 (Human liver hepatocellular carcinoma cell line) extracts

Lane 2 : HeLa (Human epithelial cell line from cervix adenocarcinoma) extracts

Lane 3 : SVT2 (Mouse cell line) extracts

Lane 4 : A549 (Human lung carcinoma cell line) extracts

Lane 5 : COS-7 (African green monkey kidney fibroblast-like cell line) extracts

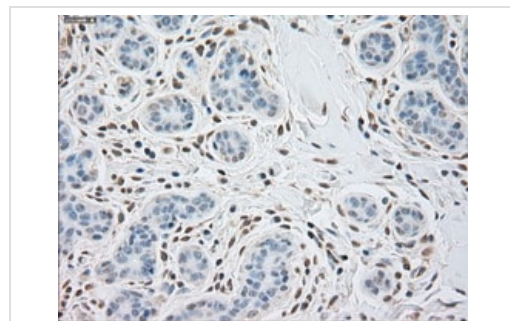
Lane 6 : Jurkat (Human T cell leukemia cell line from peripheral blood) extracts

Lane 7 : PC-12 (Rat adrenal gland pheochromocytoma cell line) extracts

Lane 8 : MCF7 (Human breast adenocarcinoma cell line) extracts

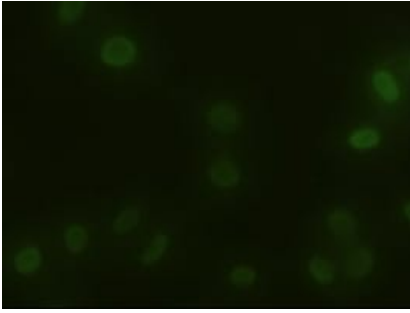
Lysates/proteins at 10 µg per lane.

Predicted band size: 103 kDa



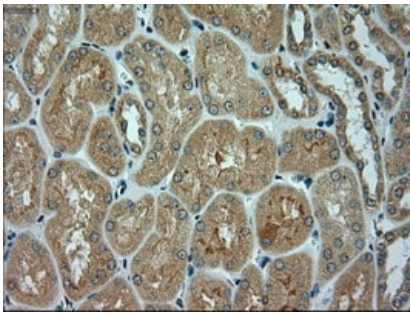
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha Actinin/ACTN1 antibody [OTI7A4] (ab90421)

Paraffin-embedded human breast tissue stained for alpha Actinin/ATCN1 with ab90421 at a 1/150 dilution in immunohistochemical analysis. Heat-induced epitope retrieval by 10 mM citric buffer, pH 6.0, 100°C for 10 minutes.



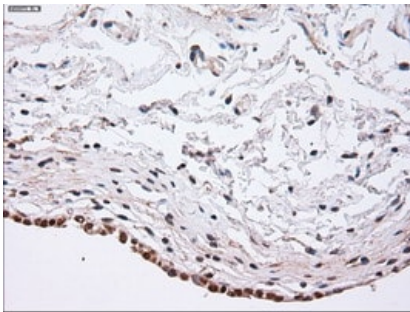
Immunocytochemistry/ Immunofluorescence - Anti-alpha Actinin/ACTN1 antibody [OT17A4] (ab90421)

HeLa (Human epithelial cell line from cervix adenocarcinoma) cells stained for alpha Actinin/ACTN1 using ab90421 at a 1/100 dilution in ICC/IF.



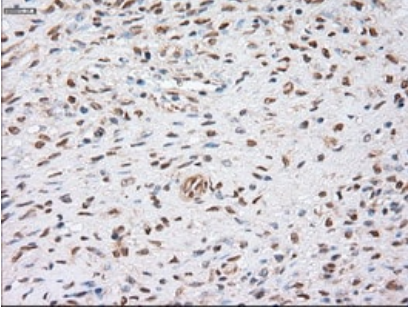
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha Actinin/ACTN1 antibody [OT17A4] (ab90421)

Paraffin-embedded human kidney tissue stained for alpha Actinin/ACTN1 with ab90421 at a 1/150 dilution in immunohistochemical analysis. Heat-induced epitope retrieval by 10 mM citric buffer, pH 6.0, 100°C for 10 minutes.



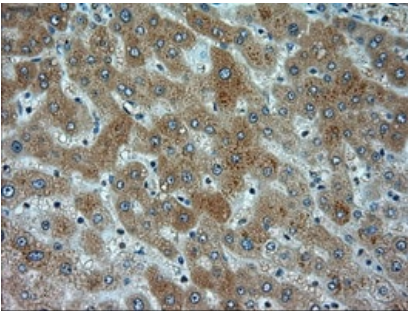
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha Actinin/ACTN1 antibody [OT17A4] (ab90421)

Paraffin-embedded human bladder tissue stained for alpha Actinin/ACTN1 with ab90421 at a 1/150 dilution in immunohistochemical analysis. Heat-induced epitope retrieval by 10 mM citric buffer, pH 6.0, 100°C for 10 minutes.



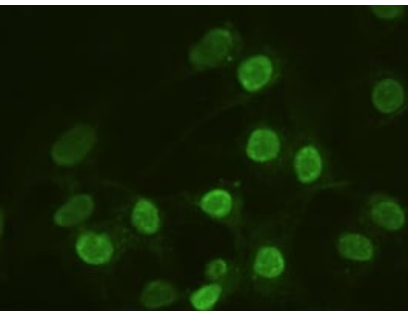
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha Actinin/ACTN1 antibody [OTI7A4] (ab90421)

Paraffin-embedded human ovary tissue stained for alpha Actinin/ACTN1 with ab90421 at a 1/150 dilution in immunohistochemical analysis. Heat-induced epitope retrieval by 10 mM citric buffer, pH 6.0, 100°C for 10 minutes.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha Actinin/ACTN1 antibody [OTI7A4] (ab90421)

Paraffin-embedded human liver tissue stained for alpha Actinin/ACTN1 with ab90421 at a 1/150 dilution in immunohistochemical analysis. Heat-induced epitope retrieval by 10 mM citric buffer, pH 6.0, 100°C for 10 minutes.



Immunocytochemistry/ Immunofluorescence - Anti-alpha Actinin/ACTN1 antibody [OTI7A4] (ab90421)

pCMV6-ENTRY alpha Actinin/ACTN1 cDNA transfected HeLa (Human epithelial cell line from cervix adenocarcinoma) cells stained for alpha Actinin/ACTN1 using ab90421 at a 1/100 dilution in ICC/IF.



Western blot - Anti-alpha Actinin/ACTN1 antibody [OTI7A4] (ab90421)

All lanes : Anti-alpha Actinin/ACTN1 antibody [OTI7A4] (ab90421) at 1/200 dilution

Lane 1 : NIH/3T3 (Mouse embryo fibroblast cell line) extracts

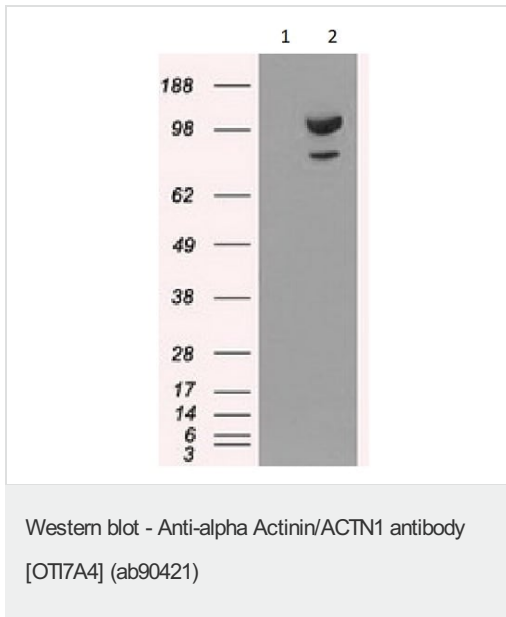
Lane 2 : Mouse brain tissue extracts

Lane 3 : Mouse liver tissue extracts

Lane 4 : Mouse spleen tissue extracts

Lysates/proteins at 10 µg per lane.

Predicted band size: 103 kDa



All lanes : Anti-alpha Actinin/ACTN1 antibody [OT17A4] (ab90421) at 1/2000 dilution

Lane 1 : HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) cells were transfected with the pCMV6-ENTRY control cDNA

Lane 2 : HEK-293T cells were transfected with pCMV6-ENTRY alpha Actinin/ATCN1 cDNA

Lysates/proteins at 5 µg per lane.

Predicted band size: 103 kDa

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

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