

Anti-alpha Actinin/ACTN1 antibody [OTI7A4] α b90421

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/ATCN1. 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, brain, and liver tissue extracts. IHC-P: Human breast, kidney, liver, ovary and bladder tissue.
General notes	<p>The clone number has been updated from 7A4 to OTI7A4, both clone numbers name the same clone.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>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, along with publications, customer reviews and Q&As</p>

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	OTI7A4
Isotype	IgG2a

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab90421 in the following tested applications.

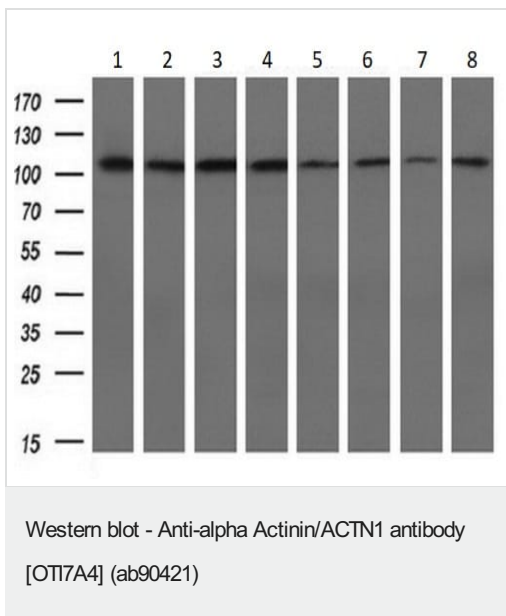
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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.

Images



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

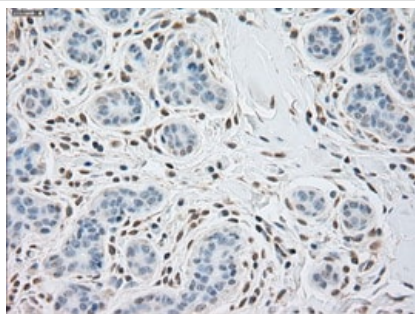
Lane 6 : Jurkat (Human T cell leukemia cell line from peripheral blood) extracts

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

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

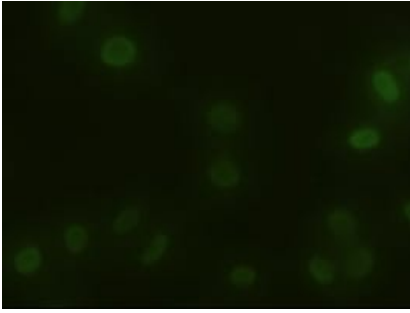
Lysates/proteins at 10 µg per lane.

Predicted band size: 103 kDa



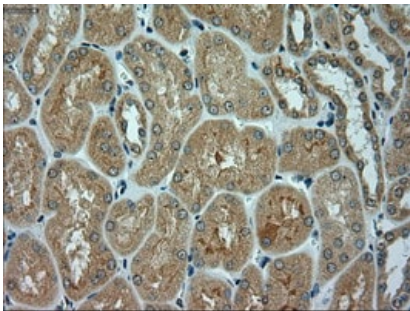
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha Actinin/ACTN1 antibody [OTI7A4] (ab90421)

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.



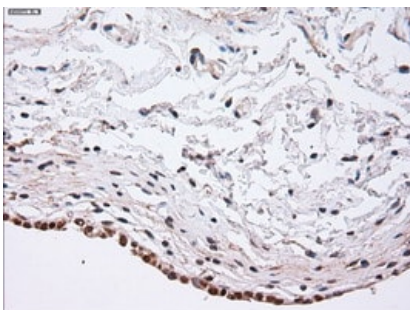
Immunocytochemistry/ Immunofluorescence - Anti-alpha Actinin/ACTN1 antibody [OT17A4] (ab90421)

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



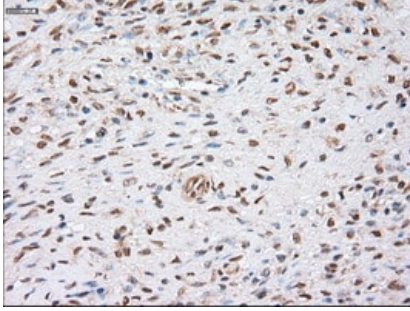
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha Actinin/ACTN1 antibody [OT17A4] (ab90421)

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.



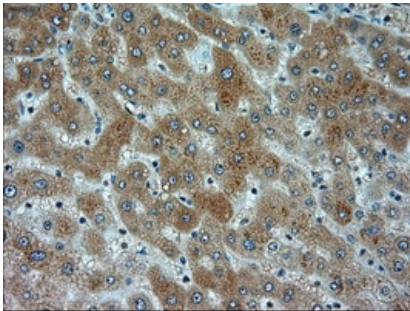
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha Actinin/ACTN1 antibody [OT17A4] (ab90421)

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.



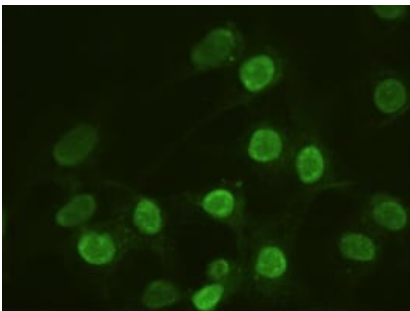
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha Actinin/ACTN1 antibody [OT17A4] (ab90421)

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.



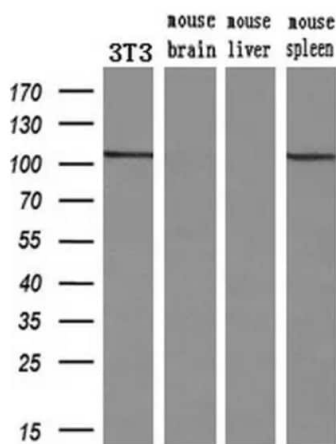
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha Actinin/ACTN1 antibody [OT17A4] (ab90421)

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 [OT17A4] (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

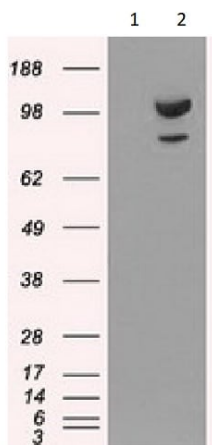
Lane 2 : Mouse brain tissue extracts

Lane 3 : Mouse liver tissue extracts

Lane 4 : Mouse spleen tissue extracts

Lysates/proteins at 10 µg per lane.

Predicted band size: 103 kDa



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

All lanes : Anti-alpha Actinin/ACTN1 antibody [OTI7A4] (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

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