

alpha Actinin 4 Polyclonal Antibody

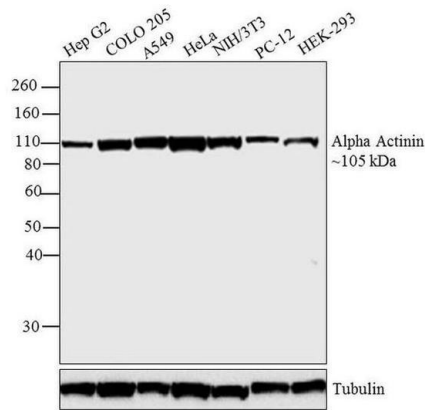
Product Details	
Size	100 µg
Species Reactivity	Human, Mouse, Rat
Published Species	Rat, Mouse, Human
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Synthetic peptide derived from the N-terminal region of the human, mouse, and orangutan alpha-Actinin-4 protein
Form	Liquid
Concentration	0.25 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS, pH 7.4
Contains	0.1% sodium azide
Storage conditions	-20°C
RRID	AB_2533514

Applications	Tested Dilution	Publications
Western Blot (WB)	2-3 µg/mL	1 Publication
Immunohistochemistry (IHC)	2-3 µg/mL	-
Immunocytochemistry (ICC/IF)	2-3 µg/mL	4 Publications
Immunoprecipitation (IP)	-	1 Publication

Product Images For alpha Actinin 4 Polyclonal Antibody

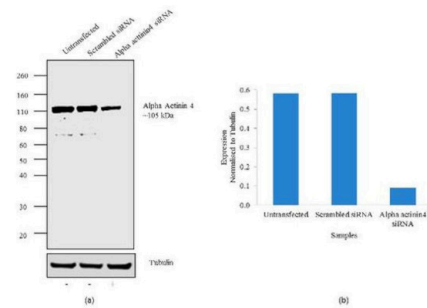
alpha Actinin 4 Antibody (42-1400) in WB

Western blot analysis was performed on whole cell extracts (30 µg lysate) of Hep G2 (Lane 1), COLO 205 (lane 2), A549 (lane 3), HeLa (Lane 4), NIH/3T3 (lane 5), PC 12 (Lane 6), and HEK 293 (Lane 7). The blots were probed with Anti-Alpha Actinin Rabbit Polyclonal Antibody (Product # 42-1400, 2 µg/mL) and detected by chemiluminescence Goat Anti-Rabbit IgG Secondary Antibody, HRP conjugate (Product # G-21234, 1:5000 dilution). A 105 kDa band corresponding to Alpha Actinin was observed across cell lines tested. Known quantity of protein samples were electrophoresed using Novex® NuPAGE® 10 % Bis-Tris gel (Product # NP0301BOX), XCell SureLock™ Electrophoresis System (Product # EI0002) and Novex® Sharp Pre-Stained Protein Standard (Product # LC5800). Resolved proteins were then transferred onto a nitrocellulose membrane with Pierce™ Power Blotter System (Product # 22834). The membrane was probed with the relevant primary and secondary Antibody following blocking with 5 % skimmed milk. Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).



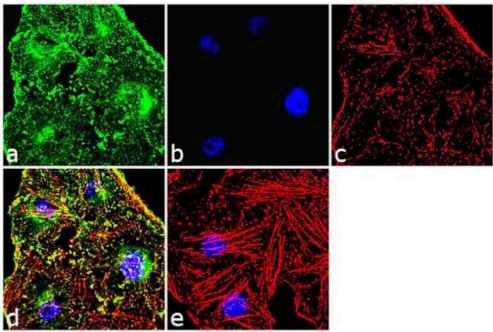
alpha Actinin 4 Antibody (42-1400)

Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. HeLa cells were transfected with alpha actinin 4 siRNA and decrease in signal intensity was observed in western blot application (Fig a) using alpha Actinin 4 Polyclonal Antibody (Product # 42-1400). Densitometric analysis of this western blot is shown in histogram (Fig b). {KD}



alpha Actinin 4 Antibody (42-1400) in ICC/IF

Immunofluorescence analysis of alpha Actinin 4 was done on 70% confluent log phase HeLa cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with alpha Actinin 4 Rabbit Polyclonal Antibody (Product # 42-1400) at 2 µg/mL in 0.1% BSA and incubated for 3 hours at room temperature and then labeled with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Alexa Fluor® 555 Rhodamine Phalloidin (Product # R415, 1:300). Panel d is a merged image showing punctuated cytoplasmic localization. Panel e is a no primary antibody control. The images were captured at 60X magnification.



View more figures on thermofisher.com

Western Blot (1)

Journal of proteome research	Year 2006
Interaction of zonula occludens-1 (ZO-1) with alpha-actinin-4: application of functional proteomics for identification of PDZ domain-associated proteins.	Species Human Rat
Authors: Chen VC, Li X, Perreault H, Nagy JI	

Immunocytochemistry (4)

Stem cell reports	Year 2021
Increased tissue stiffness triggers contractile dysfunction and telomere shortening in dystrophic cardiomyocytes.	
"Published figure using alpha Actinin 4 polyclonal antibody (Product # 42-1400) in Immunocytochemistry"	
Authors: Chang ACY, Pardon G, Chang ACH, Wu H, Ong SG, Eguchi A, Ancel S, Holbrook C, Ramunas J, Ribeiro AJS, LaGory EL, Wang H, Koleckar K, Giaccia A, Mack DL, Childers MK, Denning C, Day JW, Wu JC, Pruitt BL, Blau HM	
American journal of physiology. Renal physiology	Year 2016
N-sulfation of heparan sulfate is critical for syndecan-4-mediated podocyte cell-matrix interactions.	Dilution 4 µg/ml
"42-1400 was used in immunocytochemistry to study syndecan-4-mediated podocyte cell-matrix interactions that require N-sulfation of heparan sulfate"	
Authors: Sugar T, Wassenhove-McCarthy DJ, Orr AW, Green J, van Kuppevelt TH, McCarthy KJ	

[View more ICC/IF references on thermofisher.com](#)

Immunoprecipitation (1)

Journal of proteome research	Year 2006
Interaction of zonula occludens-1 (ZO-1) with alpha-actinin-4: application of functional proteomics for identification of PDZ domain-associated proteins.	Species Human Rat
Authors: Chen VC, Li X, Perreault H, Nagy JI	

More applications with references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.