




Product datasheet

Anti-alpha Actinin 4 antibody ab231247

7 Images

Overview

Product name	Anti-alpha Actinin 4 antibody
Description	Rabbit polyclonal to alpha Actinin 4
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Human, Pig Predicted to work with: Mouse, Rat, Cow, Orangutan 
Immunogen	Recombinant fragment (His-T7-tag) corresponding to Human alpha Actinin 4 aa 1-269. (Expressed in E.coli). Sequence: MVDYHAANQSYQYGPSSAGNGAGGGGSMGDYMAQE DDWDRDLLLLDPAWEK QQRKTFTAWCNSHLRKAGTQIENIDEDFRDGLKLMLLL EVISGERLPKPE RGKMRVHKINNVNKALDFIASKGVKLVSIGAEEMDGNA KMTLGMMVTII LRFAIQDISVEETSAKEGLLLWCQRKTAPYKNVNVQNF HISWKDGLAFNA LIHRHRPELIEYDKLRKDDPVTNLNNAFEVAEKYLDIPK MLDAEDIVNTA RPDEKAIMTYVSSFYHAF Database link: O43707 <div style="text-align: right;">  Run BLAST with  Run BLAST with </div>
Positive control	IHC-P: Human kidney, stomach, colorectal cancer, bile duct cancer and breast cancer tissues. WB: Recombinant human alpha Actinin 4 protein; MCF7 and HeLa cell lysates; Pig liver lysate.

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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide

	Constituents: PBS, 50% Glycerol
Purity	Immunogen affinity purified
Purification notes	ab231247 was purified by antigen-specific affinity chromatography followed by Protein A affinity chromatography.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab231247** in the following tested applications.

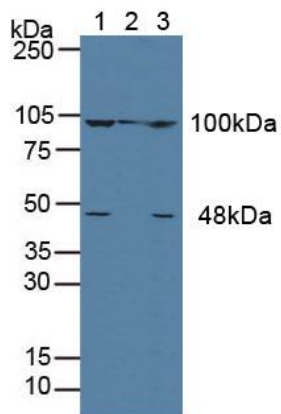
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 0.5 - 2 µg/ml. Predicted molecular weight: 105 kDa.
IHC-P		Use a concentration of 5 - 20 µg/ml.

Target

Function	F-actin cross-linking protein which is thought to anchor actin to a variety of intracellular structures. This is a bundling protein. Probably involved in vesicular trafficking via its association with the CART complex. The CART complex is necessary for efficient transferrin receptor recycling but not for EGFR degradation.
Tissue specificity	Widely expressed.
Involvement in disease	Defects in ACTN4 are the cause of focal segmental glomerulosclerosis type 1 (FSGS1) [MIM:603278]. A renal pathology defined by the presence of segmental sclerosis in glomeruli and resulting in proteinuria, reduced glomerular filtration rate and edema. Renal insufficiency often progresses to end-stage renal disease, a highly morbid state requiring either dialysis therapy or kidney transplantation.
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	Nucleus. Cytoplasm. Localized in cytoplasmic mRNP granules containing untranslated mRNAs. Colocalizes with actin stress fibers. Nuclear translocation can be induced by the PI3 kinase inhibitor wortmannin or by cytochalasin D. Exclusively localized in the nucleus in a limited number of cell lines.

Images



Western blot - Anti-alpha Actinin 4 antibody (ab231247)

All lanes : Anti-alpha Actinin 4 antibody (ab231247) at 3 µg/ml

Lane 1 : MCF7 (Human breast adenocarcinoma cell line) cell lysate

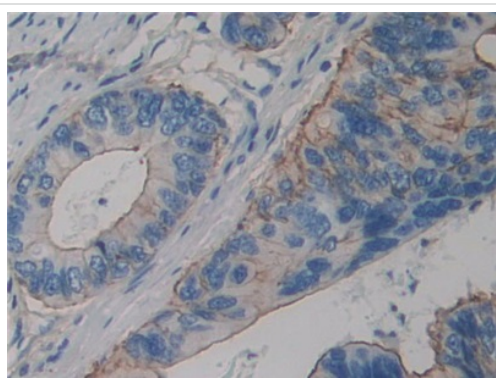
Lane 2 : Pig liver lysate

Lane 3 : HeLa (Human epithelial cell line from cervix adenocarcinoma) cell lysate

Secondary

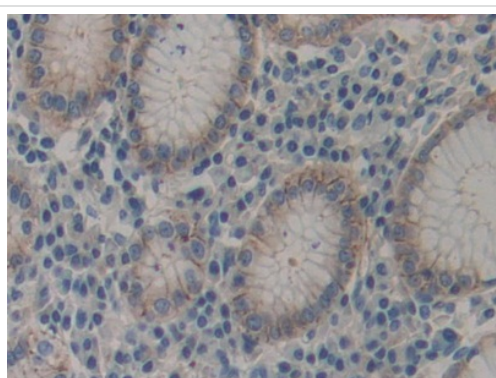
All lanes : HRP-linked Guinea pig Anti-Rabbit at 1/2000 dilution

Predicted band size: 105 kDa



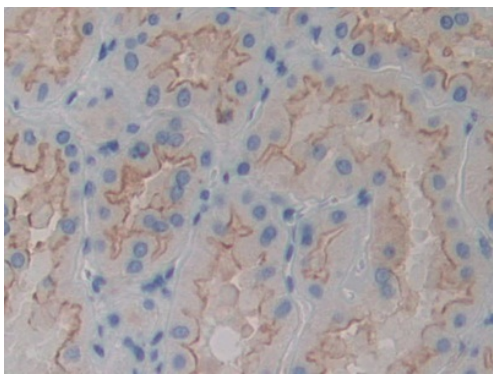
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha Actinin 4 antibody (ab231247)

Paraffin-embedded human colorectal cancer tissue stained for alpha Actinin 4 with ab231247 at 20 µg/ml in immunohistochemical analysis. DAB staining.



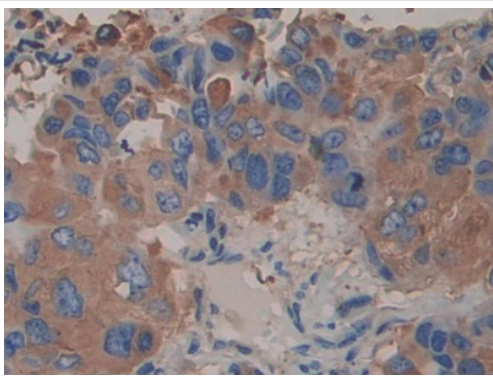
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha Actinin 4 antibody (ab231247)

Paraffin-embedded human stomach tissue stained for alpha Actinin 4 with ab231247 at 20 µg/ml in immunohistochemical analysis. DAB staining.



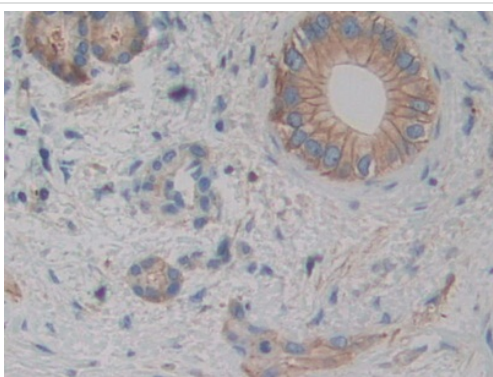
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha Actinin 4 antibody (ab231247)

Paraffin-embedded human kidney tissue stained for alpha Actinin 4 with ab231247 at 20 µg/ml in immunohistochemical analysis. DAB staining.



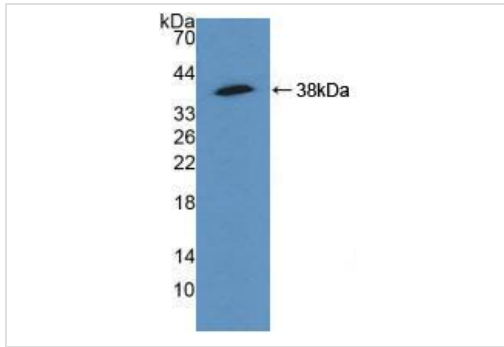
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha Actinin 4 antibody (ab231247)

Paraffin-embedded human breast cancer tissue stained for alpha Actinin 4 with ab231247 at 20 µg/ml in immunohistochemical analysis. DAB staining.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha Actinin 4 antibody (ab231247)

Paraffin-embedded human bile duct cancer (cholangiocarcinoma) tissue stained for alpha Actinin 4 with ab231247 at 20 µg/ml in immunohistochemical analysis. DAB staining.



Western blot - Anti-alpha Actinin 4 antibody
(ab231247)

Anti-alpha Actinin 4 antibody (ab231247) at 2 µg/ml + Recombinant human alpha Actinin 4 protein

Predicted band size: 105 kDa

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors