abcam

ab191007

Anti-Paxillin antibody - C-terminal

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Preservative: 0.31% Thimerosal (merthiolate), 0.06% Sodium azide Constituents: 30.75% BSA, 5.54% Sodium chloride, 1.23% Disodium hydrogenorthophosphate
Form	Liquid
Clonality	Polyclonal
Immunogen	Synthetic Peptide within Human Paxillin aa 450-500. The exact immunogen used to generate this antibody is proprietary information. Database link P49023
Purification technique	Affinity purification Immunogen
Specificity	We do not guarantee IHC-P for mouse.

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	0.5-1 µg/mL
Notes	We do not guarantee IHC-P for mouse. Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Chicken, Orangutan
Dilution info	-
Notes	-

ICC

Tested

Species	Human
Dilution info	0.5-1 µg/mL
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Chicken, Orangutan
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	0.1-0.5 µg/mL

Notes	-

Species	Mouse
Dilution info	0.1-0.5 µg/mL
Notes	-

Species	Rat
Dilution info	0.1-0.5 µg/mL
Notes	-

Predicted

Species	Chicken, Orangutan
Dilution info	-
Notes	-

IHC-Fr

Tested

Species	Rat
Dilution info	0.5-1 µg/mL
Notes	-

Expected

Species	Human, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Chicken, Orangutan
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Chicken, Orangutan
Dilution info	-
Notes	-

Target data

See full target information Paxillin

Function	Cytoskeletal protein involved in actin-membrane attachment at sites of cell adhesion to the extracellular matrix (focal adhesion). Recruits other proteins such as TRIM15 to focal adhesion.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C

Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Paxillin also known as PXN is a cytoskeletal protein involved in the assembly of focal adhesions. It has a molecular weight of approximately 68 kDa. You will find Paxillin expressed widely in various tissues including the liver colon and lung. Paxillin plays a part in cell motility by interacting with other focal adhesion proteins. It plays a significant mechanical role by serving as a docking site for structural and signaling molecules.
Biological function summary	Paxillin serves key functions in cellular processes such as migration proliferation and survival. It interacts with different proteins including vinculin and talin forming part of a complex at the focal adhesion sites. The phosphorylation state of Paxillin can modulate its interactions and in this way influence the assembly of signaling complexes that control dynamic cellular processes.
Pathways	Paxillin participates in the integrin signaling and MAPK pathways. It operates by linking integrin receptors to the actin cytoskeleton facilitating signal transduction. Paxillin phosphorylation is an important regulatory mechanism within these pathways. In particular its interaction with focal adhesion kinase (FAK) and Src family kinases signifies its role in transmitting signals from the extracellular matrix to the cellular interior which impacts cell behavior and response.
Associated diseases and disorders	Paxillin has links with osteosarcoma and lung cancer. Deregulation of Paxillin expression or its phosphorylation state contributes to oncogenic transformation and tumor progression. In cancer Paxillin associates with altered activity of proteins such as Src and FAK exacerbating disease states. This relationship highlights Paxillin's potential as a biomarker and therapeutic target in treating related malignancies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

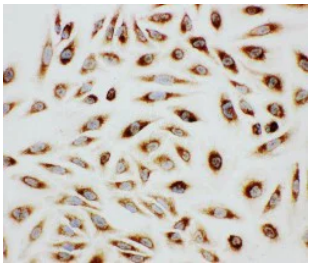
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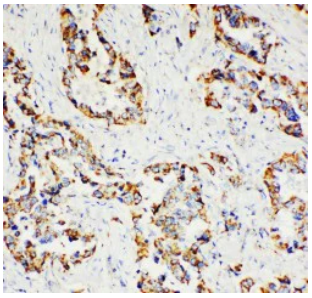
7 product images



Immunocytochemistry - Anti-Paxillin antibody - C-terminal (ab191007)

Paxillin Immunocytochemistry staining using rabbit Anti-Paxillin antibody

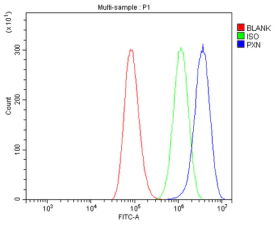
Immunocytochemical analysis of HeLa cells, labeling Paxillin with ab191007 at 1 µg/ml.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Paxillin antibody - C-terminal (ab191007)

Paxillin Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Paxillin antibody

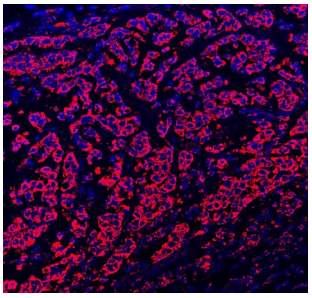
Immunohistochemical analysis of paraffin-embedded Human lung cancer tissue, labeling Paxillin with ab191007 at 1 µg/ml.



Flow Cytometry - Anti-Paxillin antibody - C-terminal (ab191007)

Paxillin Flow Cytometry staining using rabbit Anti-Paxillin antibody

Overlay histogram showing A549 cells stained with PA1804 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with ab191007 1µg/1x10^6 cells for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG 5-10µg/1x10^6 cells was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

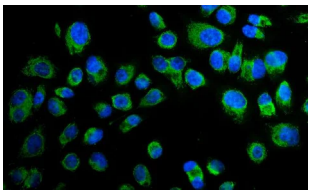


Immunocytochemistry - Anti-Paxillin antibody - C-terminal (ab191007)

Paxillin Immunocytochemistry staining using rabbit Anti-Paxillin antibody

PXN was detected in a paraffin-embedded section of human breast cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5 µg/mL

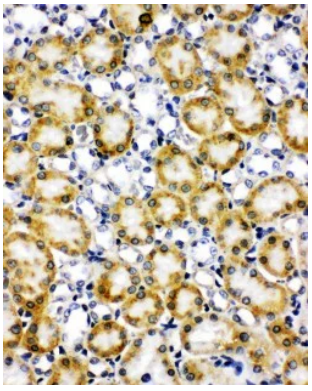
ab191007 overnight at 4°C. Biotin conjugated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Cy3 Conjugated Avidin. The section was counterstained with DAPI.



Immunocytochemistry - Anti-Paxillin antibody - C-terminal (ab191007)

Paxillin Immunocytochemistry staining using rabbit Anti-Paxillin antibody

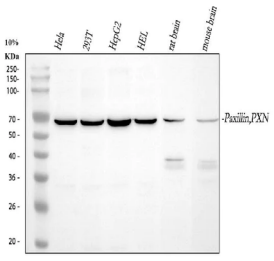
PXN was detected in immunocytochemical section of PC-3 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5µg/mL ab191007 overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1/100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI.



Immunohistochemistry (Frozen sections) - Anti-Paxillin antibody - C-terminal (ab191007)

Paxillin Immunohistochemistry (Frozen sections) staining using rabbit Anti-Paxillin antibody

Immunohistochemical analysis of frozen rat kidney tissue, labeling Paxillin with ab191007 at 1 µg/ml.



Western blot - Anti-Paxillin antibody - C-terminal (ab191007)

Paxillin Western blot staining using rabbit Anti-Paxillin antibody

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with ab191007at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1/5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PXN at approximately 65 kDa. The expected band size for PXN is at 65 kDa.
All lanes:
Western blot - Anti-Paxillin antibody - C-terminal (ab191007) at 0.5 µg/mL

Lane 1:
human Hela whole cell lysates, at 30 µg

Lane 2:
human 293T whole cell lysates, at 30 µg

Lane 3:
human HepG2 whole cell lysates, at 30 µg

Lane 4:
human HEL whole cell lysates, at 30 µg

Lane 5:
rat brain tissue lysates, at 30 µg

Lane 6:
mouse brain tissue lysates. at 30 µg

Secondary

All lanes:
goat anti-rabbit IgG-HRP at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.