abcam

ab108609

Anti-PINCH 1 + PINCH 2 antibody [EP1944]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EP1944
Purification technique	Affinity purification Protein A
Concentration	0.489 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/1000
Notes	Perform heat-mediated antigen retrieval before commencing with IHC staining protocol.

Expected

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

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/50
Notes	-

Expected

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

WB

Tested

Species	Human
Dilution info	1/10000
Notes	-

Species	Mouse
Dilution info	1/10000
Notes	-

Species	Rat
Dilution info	1/10000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/50
Notes	-

Expected

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

Target data

See full target information LIMS1

Function	Within the IPP (ILK-PINCH-PARVIN) complex, binds to F-actin, promoting F-actin bundling, a process required to generate force for actin cytoskeleton reorganization and subsequent dynamic cell adhesion events such as cell spreading and migration.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Storage information	Stable for 12 months at -20°C

Notes

This product has switched from a hybridoma to recombinant production method on 7th September 2023.

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

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

Activity summary	PINCH 1 and PINCH 2 also referred to as LIMS1 and LIMS2 are proteins involved in cellular signaling and structural functions. These proteins each have a mass of approximately 37 kDa. They are expressed ubiquitously in various tissues including the heart kidney and smooth muscle among others. Mechanically both PINCH proteins interact with integrin-linked kinase (ILK) and parvin to form the ILK-PINCH-parvin (IPP) complex which plays a significant role in integrin signaling pathways.
Biological function summary	The proteins participate in maintaining cellular adhesion and motility. As members of the IPP complex PINCH 1 and 2 are critical for connecting the extracellular matrix with the actin cytoskeleton. They help transmit signals from the extracellular environment to the cell's interior influencing cell shape and movement. These proteins are particularly important in the processes of cell survival and tissue development.
Pathways	PINCH proteins engage in integrin-mediated signaling pathways fundamental for cellular responses to mechanical and chemical stimuli. The IPP complex has significant roles in the integrin- and growth factor receptor-mediated pathways especially impacting cell migration and survival. Both proteins link with ILK and through these pathways they interact with various small GTPases that regulate cytoskeletal dynamics.
Associated diseases and disorders	PINCH 1 and 2 show connections with cancer progression and organ fibrosis. Their expression levels often change in some cancers impacting cell migration and invasion. They also link to fibrosis by influencing extracellular matrix remodeling. Through diseases like cancer PINCH proteins interact with other molecules such as focal adhesion kinase which contributes to altered cell signaling and structure observed in tumor cells and fibrotic tissues.

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

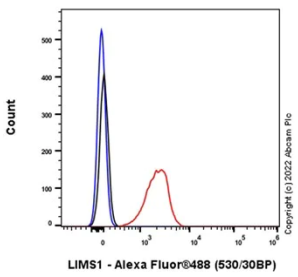
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

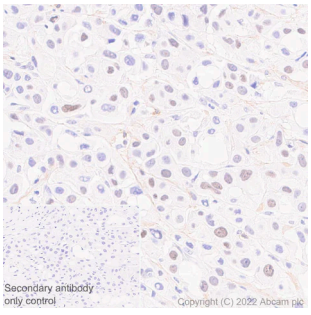
7 product images



Flow Cytometry (Intracellular) - Anti-PINCH 1 + PINCH 2 antibody [EP1944] (ab108609)

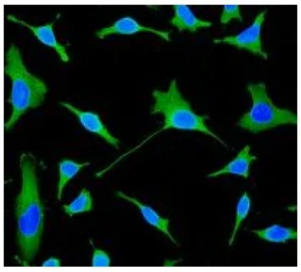
PINCH 1 + PINCH 2 Flow Cytometry (Intracellular) staining using rabbit Anti-PINCH 1 + PINCH 2 antibody

293T cells were fixed with 100µl 4% PFA for 10 min at RT, then permeabilized with 100µl 90% methanol for 30 min (-20° C) followed by blocking with 10% goat serum for 1h at room temperature. Incubate ab108609 for 30 min at room temperature (RT) and then incubate Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150081) for 30 min at room temperature.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PINCH 1 + PINCH 2 antibody [EP1944] (ab108609)

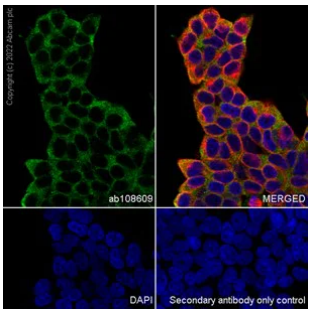
Immunohistochemical analysis of paraffin-embedded Human breast carcinoma tissue labeling PINCH 1 + PINCH 2 with ab108609 at 1/1000 dilution. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.



Immunocytochemistry/ Immunofluorescence - Anti-PINCH 1 + PINCH 2 antibody [EP1944] (ab108609)

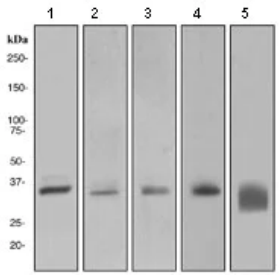
PINCH 1 + PINCH 2 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-PINCH 1 + PINCH 2 antibody

Immunofluorescent staining of HeLa cells using ab108609 at 1/100 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-PINCH 1 + PINCH 2 antibody [EP1944] (ab108609)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HepG2 cells labelling ALDH7A1 with ab108609 at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed (ab150081) at 1/1000 dilution at RT for 45 min. Alexa Fluor® 594 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (ab195889) at 1/200 dilution, was co-incubated with ab53278 overnight at 4° C. Nucleus were visualized using DAPI.



Western blot - Anti-PINCH 1 + PINCH 2 antibody [EP1944] (ab108609)

All lanes:
Western blot - Anti-PINCH 1 + PINCH 2 antibody [EP1944] (ab108609) at 1/1000 dilution

Lane 1:
293T cell lysate at 10 µg

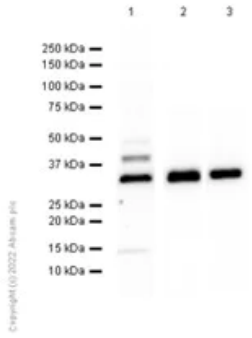
Lane 2:
HeLa cell lysate at 10 µg

Lane 3:
Jurkat cell lysate at 10 µg

Lane 4:
Human fetal kidney lysate at 10 µg

Lane 5:
Human spleen lysate at 10 µg

Observed band size: 35 kDa



Western blot - Anti-PINCH 1 + PINCH 2 antibody [EP1944] (ab108609)

Blocking and diluting buffer and concentration: 5% NFDM/TBST.
All lanes:
Western blot - Anti-PINCH 1 + PINCH 2 antibody [EP1944] (ab108609) at 1/10000 dilution

Lane 1:
HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate at 15 µg

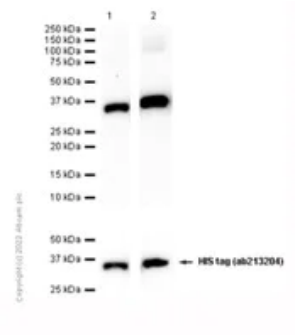
Lane 2:
Mouse kidney lysate at 15 µg

Lane 3:
Rat kidney lysate at 15 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 35 kDa



Western blot - Anti-PINCH 1 + PINCH 2 antibody [EP1944] (ab108609)

Blocking and diluting buffer and concentration: 5% NFDM/TBST.
All lanes:
Western blot - Anti-PINCH 1 + PINCH 2 antibody [EP1944] (ab108609) at 1/10000 dilution

Lane 1:
His-tagged human recombinant LIMS1 protein(aa1-325) at 10 ng

Lane 2:
His-tagged human recombinant LIMS2 protein(aa1-341) at 10 ng

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 35 kDa

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