abcam

ab240039

Anti-PDLIM1/CLP36 antibody [EPR7186(B)] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR7186(B)
Purification technique	Affinity purification Protein A
Dissociation constant	9.54×10^{-11} M

Reactivity data

WB

Expected

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

IHC-P

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information PDLIM1

Function	Cytoskeletal protein that may act as an adapter that brings other proteins (like kinases) to the cytoskeleton (PubMed:10861853). Involved in assembly, disassembly and directioning of stress fibers in fibroblasts. Required for the localization of ACTN1 and PALLD to stress fibers. Required for cell migration and in maintaining cell polarity of fibroblasts (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab240039 is the carrier-free version of ab129015.

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.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody

preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

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

Activity summary	PDLIM1 also known as CLP36 is a protein that plays a mechanical role as an actin-binding protein. It is part of the PDZ-LIM family of proteins characterized by the presence of PDZ and LIM domains. PDLIM1 has a molecular mass of approximately 36 kDa and is involved in cytoskeletal organization by connecting actin filaments to the cross-linked network. It expresses mostly in tissues like the heart skeletal muscles and to some degree in others such as liver and lungs.
Biological function summary	PDLIM1 connects to actin filaments helping in maintaining cytoskeletal dynamics and cell structure. This protein is part of the larger complex involved in organizing actin filaments. PDLIM1 through interactions with cytoskeletal components regulates muscle contraction and cell motility. It stabilizes actin filaments through its PDZ domain and modulates signal transduction pathways linked to cellular adhesion and movement.
Pathways	Studies have identified PDLIM1's involvement in the regulation of signaling pathways such as the MAPK and Wnt pathways. Through these processes PDLIM1 interacts with proteins like kinases and phosphatases which play a role in signal transduction and cellular communication. By modulating these pathways PDLIM1 influences cell growth and differentiation processes critical in tissue development and maintenance.
Associated diseases and disorders	PDLIM1 is linked to conditions involving muscle malfunction and some cancer forms. Abnormal expression of PDLIM1 correlates with cardiomyopathies as it affects heart muscle function. Also changes in PDLIM1 levels have connections to several cancers possibly through pathways involving proteins such as β-catenin an important player in cell proliferation and tumor growth. Understanding these links may provide insights into novel therapeutic strategies for these conditions.

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

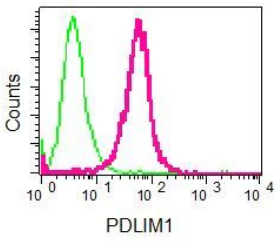
We do not recommend this combination. It is not covered by our product promise.

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.

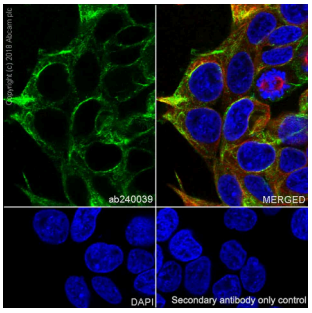
3 product images



Flow Cytometry (Intracellular) - Anti-PDLIM1/CLP36 antibody [EPR7186(B)] - BSA and Azide free (ab240039)

PDLIM1/CLP36 Flow Cytometry (Intracellular) staining using rabbit Anti-PDLIM1/CLP36 antibody

ab129015, at 1/100 dilution, staining PDLIM1/CLP36 in permeabilized Saos 2 cells by intracellular flow cytometry or a Rabbit IgG negative control (green).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab129015).

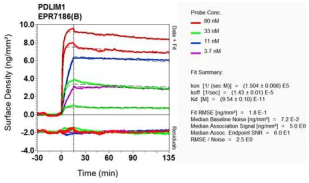


Immunocytochemistry/ Immunofluorescence - Anti-PDLIM1/CLP36 antibody [EPR7186(B)] - BSA and Azide free (ab240039)

PDLIM1/CLP36 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-PDLIM1/CLP36 antibody

Immunocytochemistry/ Immunofluorescence analysis of 293T (human embryonic kidney epithelial cell) cells labeling PDLIM1/CLP36 with purified ab129015 at 1/100 dilution (10 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/mL). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1/1000 (2 µg/mL) dilution. DAPI (blue) was used as nuclear counterstain. ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/mL) was used as the secondary antibody only control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab129015).



OI-RD Scanning - Anti-PDLIM1/CLP36 antibody [EPR7186(B)] - BSA and Azide free (ab240039)

We have systematically measured KD (the equilibrium dissociation constant between the antibody and its antigen), of more than 840 recombinant antibodies to assess not only their individual KD values but also to see the average affinity of antibody. Based on the comparison with published literature values for mouse monoclonal antibodies, Recombinant antibodies appear to be on average 1-2 order of magnitude higher affinity.

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