abcam

ab182153

Anti-PDLIM7 antibody [EPR13171]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 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	EPR13171
Purification technique	Affinity purification Protein A
Specificity	The immunogen sequence for ab182153 shares 86% homology with the mouse PDLIM7 protein however in our hands this antibody did not work in mouse and rat samples in western blot (no bands detected). In some human cell lines, in addition to the band of interest detected at 50 kDa, this product also bound to a protein at ~37-40 kDa in weight. For best results it may be preferable to use a harsh lysis protocol for preparation of cell or tissue lysates. Please see notes in the western blot image below.
Concentration	0.311 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/100
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/60
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target data

See full target information PDLIM7

Function	May function as a scaffold on which the coordinated assembly of proteins can occur. May play a role as an adapter that, via its PDZ domain, localizes LIM-binding proteins to actin filaments of both skeletal muscle and nonmuscle tissues. Involved in both of the two fundamental mechanisms of bone formation, direct bone formation (e.g. embryonic flat bones mandible and cranium), and endochondral bone formation (e.g. embryonic long bone development). Plays a role during fracture repair. Involved in BMP6 signaling pathway (By similarity).

Storage

Shipped at conditions	Conditional Ambient
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

Notes

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	PDLIM7 also known as Enigma or LMP-1 is a protein involved in several cellular processes. It has a molecular mass of approximately 54 kDa and contains PDZ and LIM domains which facilitate its function. PDLIM7 is broadly expressed in tissues including heart skeletal muscle and osteoblasts. The protein acts mechanically by organizing cytoskeletal components and bridging interactions between actin filaments and other cellular structures.
Biological function summary	PDLIM7 plays a role in assembling protein complexes that influence structural and signaling pathways. This protein participates in bone development and remodeling processes linking it to skeletal system maintenance and repair. Through its LIM domains PDLIM7 facilitates the interaction with various binding partners. It serves as a scaffold helping to maintain proper cellular architecture and function.
Pathways	PDLIM7 integrates into the TGF-beta signaling cascade an important regulatory pathway in cellular differentiation and proliferation. It interacts with proteins such as SMADs which transmit signals from the cell membrane to the nucleus modulating gene expression. PDLIM7 also associates with the MAPK pathway influencing cellular responses to extracellular stimuli and stress.

Associated diseases and disorders	Aberrant expression or function of PDLIM7 has been linked to bone-related diseases such as osteosarcoma and osteoporosis. Changes in PDLIM7 expression may disrupt normal bone density and growth contributing to these conditions. PDLIM7's interaction with proteins like SMADs in pathological contexts highlights its role in disease progression especially in diseases linked to abnormal bone formation or degradation.

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

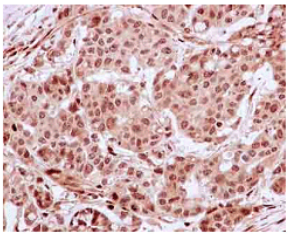
We do not recommend this combination. It is not covered by our product promise.

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.

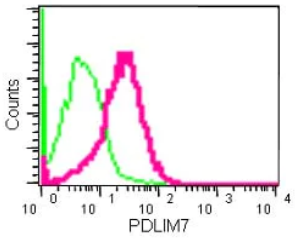
3 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDLIM7 antibody [EPR13171] (ab182153)

PDLIM7 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PDLIM7 antibody

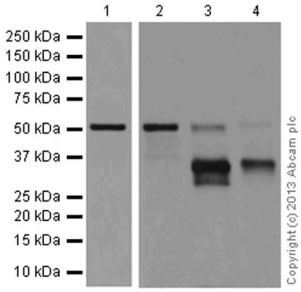
Immunohistochemical analysis of paraffin-embedded Human infiltrating ductal breast carcinoma tissue labeling PDLIM7 with ab182153 at 1/100 dilution followed by pre-diluted HRP-conjugated secondary antibody and counter-stained with Hematoxylin.
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-PDLIM7 antibody [EPR13171] (ab182153)

PDLIM7 Flow Cytometry (Intracellular) staining using rabbit Anti-PDLIM7 antibody

Intracellular flow cytometric analysis of HeLa cells (paraformaldehyde-fixed, 2%) labeling PDLIM7with ab182153 at 1/60 dilution (red) or a rabbit IgG (negative) (green), followed by Goat anti rabbit IgG (FITC) secondary at 1/150 dilution.



Western blot - Anti-PDLIM7 antibody [EPR13171] (ab182153)

Blocking buffer: 5% NFDM/TBST
Dilution buffer:5% NFDM/TBST

Lane 1 exposure time: 1 minute

Lanes 2 - 4 exposure time: 3 minutes

Lane 1:
Western blot - Anti-PDLIM7 antibody [EPR13171] (ab182153) at 1/10000 dilution

Lanes 2 - 4:
Western blot - Anti-PDLIM7 antibody [EPR13171] (ab182153) at 1/2000 dilution

Lane 1:
HeLa (human cervix adenocarcinoma) whole cell lysate at 10 µg

Lane 2:
Jurkat (human acute T cell leukemia) whole cell lysate at 10 µg

Lane 3:
WI-38 (human lung) whole cell lysate at 10 µg

Lane 4:
SK-OV-3 (human adenocarcinoma) whole cell lysate at 10 µg

Secondary

All lanes:
Goat anti-rabbit IgG (H+L) peroxidase conjugated at 1/1000 dilution

Predicted band size: 50 kDa

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