abcam

ab232421

Anti-PEX19 antibody [EPR9266(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	EPR9266(B)
Purification technique	Affinity purification Protein A

Reactivity data

IP

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Expected

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

Predicted

Species	Mouse
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	ab172730 - 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 PEX19

Function	Necessary for early peroxisomal biogenesis. Acts both as a cytosolic chaperone and as an import receptor for peroxisomal membrane proteins (PMPs). Binds and stabilizes newly synthesized PMPs in the cytoplasm by interacting with their hydrophobic membrane-spanning domains, and targets them to the peroxisome membrane by binding to the integral membrane protein PEX3. Excludes CDKN2A from the nucleus and prevents its interaction with MDM2, which results in active degradation of TP53.

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

ab232421 is the carrier-free version of ab137072.

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	PEX19 also known as peroxisomal biogenesis factor 19 is a protein important for the assembly of peroxisomal membranes. It has a molecular mass of approximately 36 kDa and is expressed across multiple tissues in the human body with particularly high levels in the liver and kidneys. This protein functions as a chaperone and is essential for the import of peroxisomal membrane proteins. It plays a significant role in the binding of these peroxisomal proteins and helps in their transportation to the peroxisomes.
Biological function summary	The protein plays a central role in peroxisome biogenesis facilitating the correct assembly and maintenance of the peroxisome. PEX19 interacts with other components in the peroxisomal import machinery such as PEX3 and PEX16 forming a complex responsible for the recognition and stabilization of peroxisomal membrane proteins. Through these interactions it ensures the functional integrity of peroxisomes which are important for metabolic tasks like fatty acid beta-oxidation and detoxification of hydrogen peroxide.
Pathways	PEX19 is involved in the peroxisomal protein import pathway and the broader lipid metabolism pathway. It plays an important role in peroxisomal membrane assembly through its interactions with PEX3 a receptor on the peroxisomal membrane that facilitates protein docking. This process is essential for maintaining efficient peroxisomal functions as disruptions may lead to metabolic imbalances involving lipids and reactive oxygen species.
Associated diseases and disorders	PEX19 has significant implications in peroxisomal biogenesis disorders including Zellweger spectrum disorders. Mutations or deficiencies in PEX19 can lead to impaired peroxisome formation manifesting in severe metabolic dysfunctions.

PEX19 is linked to disorders characterized by neurological deficits liver dysfunction and skeletal abnormalities. Its relationship with PEX3 is also critical in these disorders as any disruptions in their interaction can exacerbate the condition's severity.

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

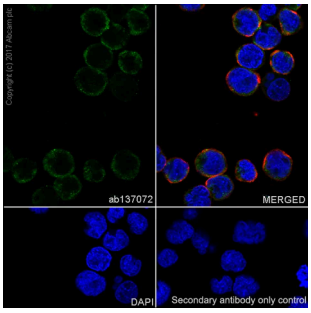
We do not recommend this combination. It is not covered by our product promise.

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.

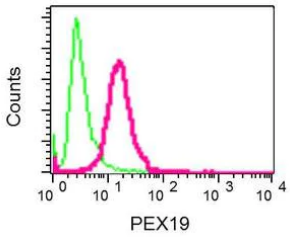
3 product images



Immunocytochemistry/ Immunofluorescence - Anti-PEX19 antibody [EPR9266(B)] - BSA and Azide free (ab232421)

PEX19 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-PEX19 antibody

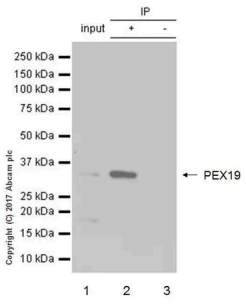
Immunocytochemistry/ Immunofluorescence analysis of MOLT-4 (Human lymphoblastic leukemia T lymphoblast) cells labeling PEX19 with Purified ab137072 at 1:100 (10.2 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with ab195889 Anti-alpha 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 nuclear counterstain. PBS instead of the primary antibody 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 (ab137072).



Flow Cytometry (Intracellular) - Anti-PEX19 antibody [EPR9266(B)] - BSA and Azide free (ab232421)

PEX19 Flow Cytometry (Intracellular) staining using rabbit Anti-PEX19 antibody

Intracellular flow cytometric analysis of permeabilized Jurkat (Human T cell leukemia cell line from peripheral blood) cells labeling PEX19 with ab137072 (red) or a rabbit IgG (negative) (green). This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab137072).



Immunoprecipitation - Anti-PEX19 antibody [EPR9266(B)] - BSA and Azide free (ab232421)

ab137072 (purified) at 1:50 dilution (2µg) immunoprecipitating PEX19 in MOLT-4 whole cell lysate.
Lane 1 (input): MOLT-4 (Human lymphoblastic leukemia T lymphoblast) whole cell lysate 10µg
Lane 2 (+): ab137072 & MOLT-4 whole cell lysate
Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab137072 in MOLT-4 whole cell lysate
For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1:1000 dilution.
Blocking and diluting buffer: 5% NFDM/TBST.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab137072).

All lanes:
Immunoprecipitation - Anti-PEX19 antibody [EPR9266(B)] (ab137072)

Predicted band size: 33 kDa

Observed band size: 33 kDa

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