abcam

ab248654

Anti-Mitochondrial ribosomal protein L11 antibody [EPR9111(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	EPR9111(B)
Purification technique	Affinity purification Protein A
Dissociation constant	8.1×10^{-11} M
Concentration	1.034 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human

Dilution info	-
Notes	-

WB

Expected

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

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information MRPL11

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

ab248654 is the carrier-free version of ab133789.

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.

Species reactivity

Rat: We have preliminary internal testing data to indicate this antibody may not react with this species.
Please contact us for more information.

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	Mitochondrial ribosomal protein L11 often called MRPL11 forms an important part of the mitochondrial ribosome or mitoribosome which plays an important role in protein synthesis within the mitochondria. MRPL11 has a mass of approximately 21.3 kDa and is expressed in tissues with high metabolic activity such as the heart and skeletal muscles. It differs from proteins found in the cytosolic ribosomes due to variations in protein to rRNA ratio and the presence of specific mitochondrial sequences.

Biological function summary	This protein contributes to the formation and functional stability of the large subunit of the mitochondrial ribosome. MRPL11 is an integral part of the mitoribosomal complex and it collaborates closely with mitochondrial ribosome protein L10 and L12. The assembly of these proteins ensures efficient mitochondrial translation which subsequently impacts mitochondrial energy production and apoptotic signaling.
Pathways	MRPL11 is deeply embedded in mitochondrial translation and oxidative phosphorylation pathways. These pathways are essential for cellular energy production and metabolism. MRPL11 interacts with other mitochondrial proteins such as mRNA encoders and enzymes in the electron transport chain. It ensures correct assembly and function of the mitochondrial machinery influencing energy demands through the connection to translation regulation and metabolic balance.
Associated diseases and disorders	MRPL11 is associated with mitochondrial disorders like mitochondrial myopathy and neurodegenerative diseases. Mutations or dysregulations in MRPL11 can impair mitochondrial translation leading to compromised energy metabolism. Its dysfunction can involve other mitochondrial proteins such as those forming the electron transport chain or involved in cardiolipin metabolism contributing to the disease mechanisms. Understanding MRPL11's role offers insights into therapeutic targets for disease intervention in 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

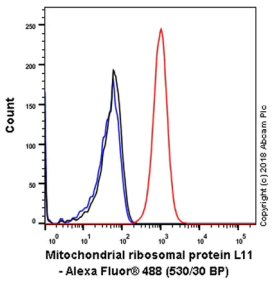
We do not recommend this combination. It is not covered by our product promise.

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.

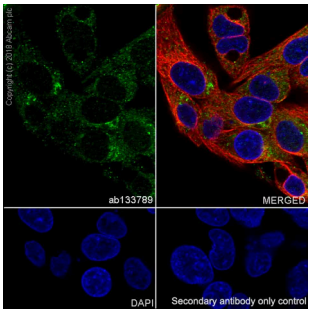
3 product images



Flow Cytometry (Intracellular) - Anti-Mitochondrial ribosomal protein L11 antibody [EPR9111(B)] - BSA and Azide free (ab248654)

Mitochondrial ribosomal protein L11 Flow Cytometry (Intracellular) staining using rabbit Anti-Mitochondrial ribosomal protein L11 antibody

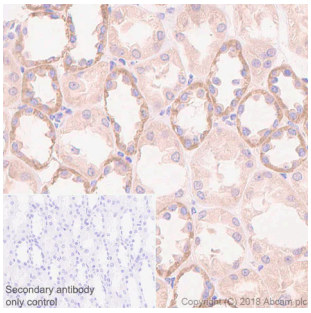
Intracellular Flow Cytometry analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling Mitochondrial ribosomal protein L11 with purified ab133789 at 1/120 dilution (10µg/ml) (red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab133789).



Immunocytochemistry/ Immunofluorescence - Anti-Mitochondrial ribosomal protein L11 antibody [EPR9111(B)] - BSA and Azide free (ab248654)

Mitochondrial ribosomal protein L11 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Mitochondrial ribosomal protein L11 antibody

Immunocytochemistry/ Immunofluorescence analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling Mitochondrial ribosomal protein L11 with purified ab133789 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) at 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. 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 (ab133789).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mitochondrial ribosomal protein L11 antibody [EPR9111(B)] - BSA and Azide free (ab248654)

Mitochondrial ribosomal protein L11 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Mitochondrial ribosomal protein L11 antibody

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human kidney tissue sections labeling Mitochondrial ribosomal protein L11 with purified ab133789 at 1/200 dilution (6.2 µg/ml). Heat mediated antigen retrieval was performed using heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab133789).

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