abcam

ab182556

Anti-RPL9 antibody [EP13752]

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	EP13752
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/50000
Notes	-

Species	Mouse

Dilution info	1/50000
Notes	-

Species	Rat
Dilution info	1/50000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/50
Notes	-

Expected

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

IHC-P

Tested

Species	Human
Dilution info	1/1000 - 1/5000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Mouse
Dilution info	1/1000 - 1/5000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Rat
Dilution info	1/1000 - 1/5000

Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/50
Notes	-

Expected

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

IP

Tested

Species	Human
Dilution info	1/30
Notes	-

Expected

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

Target data

See full target information RPL9

Function	Component of the large ribosomal subunit (PubMed:23636399, PubMed:32669547). The ribosome is a large ribonucleoprotein complex responsible for the synthesis of proteins in the cell (PubMed:23636399, PubMed:32669547).

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	The RPL9 protein also known as Ribosomal Protein L9 plays a role in the structure and function of ribosomes. This protein is part of the large ribosomal subunit facilitating the assembly of proteins. With a molecular mass of approximately 21 kDa RPL9 resides in the cytoplasm where ribosomes are largely found reflecting its function. Broadly expressed across various tissues it is essential for ribosomal integrity and efficient protein synthesis.

Biological function summary	RPL9 is involved in ribosome biogenesis and translation processes. As a component of the ribosomal complex it aids in the production of new proteins by translating messenger RNA (mRNA) into polypeptides. This function is tightly regulated and essential for maintaining cellular protein homeostasis. Additionally RPL9 participates in ribosomal assembly ensuring the proper folding and function of ribosomes.
Pathways	RPL9 plays an integral part in the mRNA translation pathway. It associates with other ribosomal proteins such as RPL5 and RPL11 forming a functional ribosomal unit. RPL9 contributes to the translation of mRNA into proteins an indispensable step in various cellular growth and proliferation pathways. Its interactions with these pathways highlight its role in regulating protein synthesis necessary for cell function.
Associated diseases and disorders	RPL9 has been linked to Diamond-Blackfan Anemia (DBA) and other ribosomopathies. These conditions arise from defects in ribosomal protein production leading to impaired hematopoiesis. RPL9 mutations could affect the assembly of ribosomes similar to other ribosomal proteins like RPS19. These diseases underline the importance of RPL9 in maintaining ribosome function and cellular health.

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

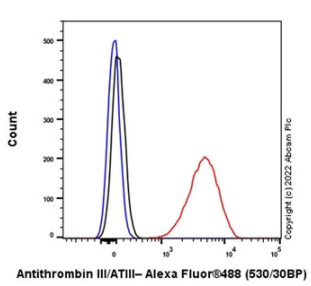
We do not recommend this combination. It is not covered by our product promise.

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.

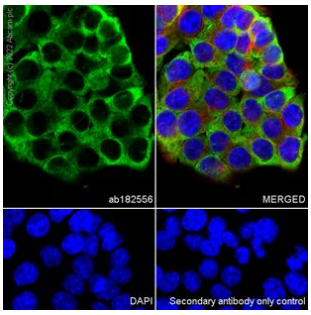
7 product images



Flow Cytometry (Intracellular) - Anti-RPL9 antibody [EP13752] (ab182556)

RPL9 Flow Cytometry (Intracellular) staining of HeLa cells using rabbit Anti-RPL9 antibody

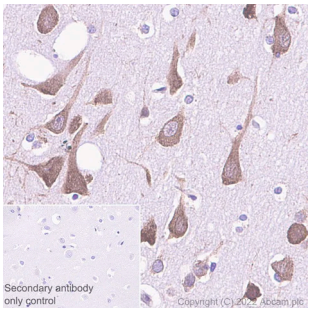
HeLa cells were fixed with 100µl 4% PFA for 10 min at RT, then permeabilized with 100µl 90% methanol for 30 min (-20° C) followed by blocking with 10% goat serum for 1h at room temperature. Incubate ab182556 for 30 min at room temperature (RT) and then incubate Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150081) for 30 min at room temperature.



Immunocytochemistry/ Immunofluorescence - Anti-RPL9 antibody [EP13752] (ab182556)

RPL9 Immunocytochemistry/ Immunofluorescence staining of HCT 116 cells using rabbit Anti-RPL9 antibody

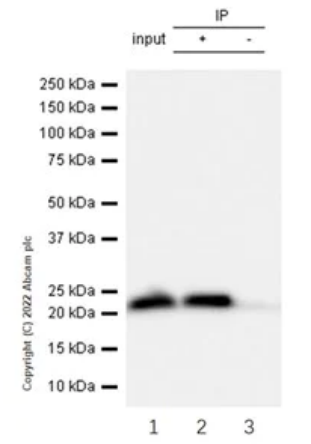
HCT 116 cells were fixed in 4% PFA and permeabilized with 0.1% Triton X-100. Primary antibody, ab182556 at 1/100 was incubated overnight at 4° C, followed by AlexaFluor® 488-conjugated Goat anti- Rabbit secondary antibody (ab150081) at 1/1000 dilution at RT for 45 min. ab195889 AlexaFluor® 594-conjugated Anti-alpha Tubulin, used as a counterstain at 1/200 dilution, was co-incubated with ab119348 overnight at 4° C. Nucleus were visualized using DAPI.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RPL9 antibody [EP13752] (ab182556)

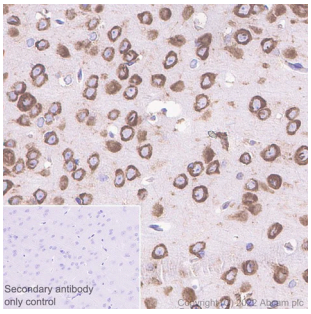
RPL9 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of human cerebrum using rabbit Anti-RPL9 antibody

The human cerebrum sections were performed by Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins, then the sections were labelled with ab182556 at 1/1000 dilution for 30 mins at room temperature. The Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) were used as secondary antibody. The sections Counterstained with hematoxylin. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



Immunoprecipitation - Anti-RPL9 antibody [EP13752] (ab182556)

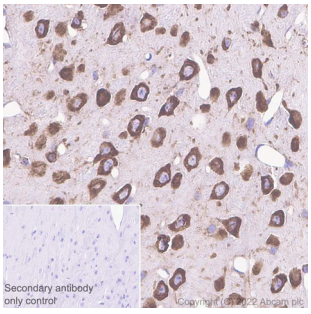
RPL9 was immunoprecipitated from 0.35 mg of HepG2 whole cell lysate with ab182556 at 1/30 dilution. Western blot was performed from the immunoprecipitated using ab182556 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used as secondary antibody at 1/5000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RPL9 antibody [EP13752] (ab182556)

RPL9 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of rat cerebrum using rabbit Anti-RPL9 antibody

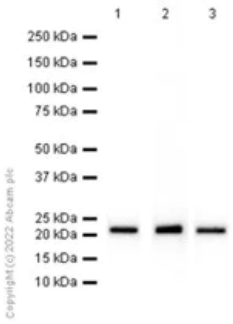
The rat cerebrum sections were performed by Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins, then the sections were labelled with ab182556 at 1/5000 dilution for 30 mins at room temperature. The Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) were used as secondary antibody. The sections Counterstained with hematoxylin. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RPL9 antibody [EP13752] (ab182556)

RPL9 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of mouse cerebrum using rabbit Anti-RPL9 antibody

The mouse cerebrum sections were performed by Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins, then the sections were labelled with ab182556 at 1/5000 dilution for 30 mins at room temperature. The Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) were used as secondary antibody. The sections Counterstained with hematoxylin. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



Western blot - Anti-RPL9 antibody [EP13752] (ab182556)

RPL9 Western blot staining using rabbit Anti-RPL9 antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST Primary antibody: incubated for 1h at room temperature. Secondary antibody: incubated for 1h at 1:20,000 at room temperature.
Exposure time: Lane 1, Lane 3: 3 seconds, Lane 2: 10 seconds
All lanes:
Western blot - Anti-RPL9 antibody [EP13752] (ab182556) at 1/50000 dilution

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

Lane 2:
NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate at 15 µg

Lane 3:
C6 (Rat glial tumor glial cell) whole cell lysate at 15 µg

Secondary

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

Developed using the ECL technique.

Performed under reducing conditions.

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