abcam

ab175213

Anti-Ribosomal protein S11/RPS11 antibody [EPR11487]

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	EPR11487
Purification technique	Affinity purification Protein A
Concentration	0.111 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/50 - 1/100

Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/5000
Notes	-

Expected

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

ICC/IF

Tested

Species	Human
Dilution info	1/100 - 1/250

Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/10 - 1/100
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 40S ribosomal protein S11

Function	Component of the small ribosomal subunit. The ribosome is a large ribonucleoprotein complex responsible for the synthesis of proteins in the cell. Part of the small subunit (SSU) processome, first precursor of the small eukaryotic ribosomal subunit. During the assembly of the SSU processome in the nucleolus, many ribosome biogenesis factors, an RNA chaperone and ribosomal proteins associate with the nascent pre-rRNA and work in concert to generate RNA folding, modifications, rearrangements and cleavage as well as targeted degradation of pre-ribosomal RNA by the RNA exosome (PubMed:34516797).

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	Ribosomal protein S11 also known as RPS11 or BSA S11 is a component of the small 40S subunit of ribosomes. It has a mass of about 18.8 kDa. RPS11 is expressed across various tissues essential for protein synthesis in eukaryotic cells. It plays a mechanical role in facilitating the assembly and proper function of the ribosome which is critical for translating mRNA into protein.
Biological function summary	RPS11 serves as an important player in the ribosomal complex vital for maintaining the structure and function of the ribosome. It assists in the binding of mRNA and tRNA promoting the translation process. The precise arrangement of RPS11 and its interactions with other ribosomal proteins ensures efficient protein synthesis necessary for cell growth and function.
Pathways	RPS11 plays a significant role in the translation mechanism including the mTOR pathway which regulates cell growth in response to nutrients and growth factors. Through this pathway RPS11 works in conjunction with proteins like S6 kinase and 4E-BP1 modulating protein translation rates in various cellular conditions.

	Additionally RPS11 contributes to the ribosomal biogenesis pathway integrating signals for assembly and function of ribosomes.
Associated diseases and disorders	Disruptions in RPS11 regulation or mutations can lead to conditions such as Diamond-Blackfan anemia characterized by reduced red blood cell production. RPS11's interaction with other ribosomal proteins like RPS19 has been implicated in this disorder. Moreover altered expression of RPS11 may play a role in various cancers influencing tumor growth and malignancy due to abnormal protein synthesis rates.

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

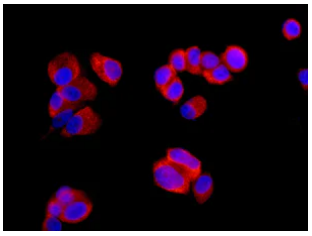
We do not recommend this combination. It is not covered by our product promise.

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.

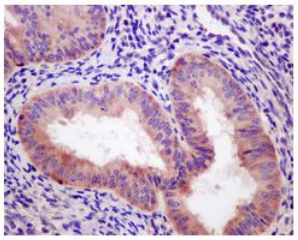
5 product images



Immunocytochemistry/ Immunofluorescence - Anti-Ribosomal protein S11/RPS11 antibody [EPR11487] (ab175213)

Ribosomal protein S11/RPS11 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Ribosomal protein S11/RPS11 antibody

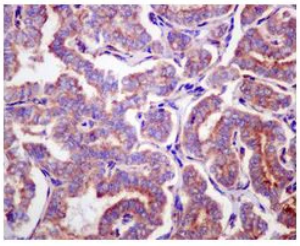
Immunofluorescent staining of MCF7 cells labeling Ribosomal protein S11/RPS11 with ab175213 at 1/100 dilution (red). DAPI nuclear staining (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ribosomal protein S11/RPS11 antibody [EPR11487] (ab175213)

Ribosomal protein S11/RPS11 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Ribosomal protein S11/RPS11 antibody

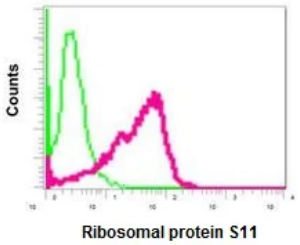
Immunohistochemical analysis of paraffin-embedded Human uterus tissue labeling Ribosomal protein S11/RPS11 with ab175213 at 1/50 dilution.
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ribosomal protein S11/RPS11 antibody [EPR11487] (ab175213)

Ribosomal protein S11/RPS11 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Ribosomal protein S11/RPS11 antibody

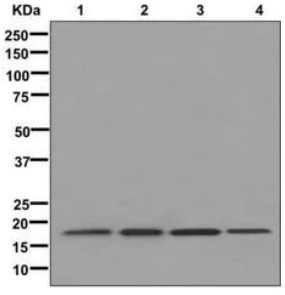
Immunohistochemical analysis of paraffin-embedded Human thyroid carcinoma tissue labeling Ribosomal protein S11/RPS11 with ab175213 at 1/50 dilution.
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-Ribosomal protein S11/RPS11 antibody [EPR11487] (ab175213)

Ribosomal protein S11/RPS11 Flow Cytometry (Intracellular) staining using rabbit Anti-Ribosomal protein S11/RPS11 antibody

Intracellular flow cytometric analysis of permeabilized HeLacells labeling Ribosomal protein S11/RPS11 with ab175213at 1/10 dilution (red) compared toa Rabbit IgGnegative control (green).



Western blot - Anti-Ribosomal protein S11/RPS11 antibody [EPR11487] (ab175213)

All lanes:
Western blot - Anti-Ribosomal protein S11/RPS11 antibody [EPR11487] (ab175213) at 1/1000 dilution

Lane 1:
Jurkat cell lysate at 10 µg

Lane 2:
MCF7 cell lysate at 10 µg

Lane 3:
HeLa cell lysate at 10 µg

Lane 4:
293T cell lysate at 10 µg

Predicted band size: 18 kDa

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