abcam

ab249237

Anti-RPS19 antibody [EPR10422] - 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	EPR10422
Purification technique	Affinity purification Protein A
Concentration	0.953 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-

Notes	-

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-

Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information 40S ribosomal protein S19

Function	Component of the small ribosomal subunit (PubMed:23636399). The ribosome is a large ribonucleoprotein complex responsible for the synthesis of proteins in the cell (PubMed:23636399). Required for pre-rRNA processing and maturation of 40S ribosomal subunits (PubMed:16990592). 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	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab249237 is the carrier-free version of ab155994.

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	RPS19 also known as Ribosomal Protein S19 is a component of the small 40S ribosomal subunit. It has a molecular weight of approximately 16 kDa. This protein is widely expressed in many tissues including the bone marrow and spleen which are important for hematopoiesis. RPS19 plays a mechanical role in ensuring the formation and function of ribosomes which are essential for protein synthesis. By participating in ribosome assembly it supports the translational machinery of cells.
Biological function summary	Ribosomal protein S19 holds a critical place in ribosome biogenesis. It is part of the ribosomal protein family and works together with other ribosomal proteins to create functional ribosomes necessary for cellular protein synthesis. As part of the 40S ribosomal subunit RPS19 facilitates the accurate translation of mRNA into proteins which is fundamental for cell growth and proliferation. The 40S subunit alongside the 60S subunit completes the formation of the functional ribosome.
Pathways	Ribosomal protein S19 contributes to the essential process of translation an important pathway within cell biology. It plays a part in the ribosome assembly pathway a pivotal process necessary for cell survival and function. RPS19 interacts closely with other ribosomal proteins such as RPS24 and RPS14 ensuring the proper assembly and functionality of the ribosomal subunits. These interactions are integral to maintaining cellular homeostasis and protein production.
Associated diseases and disorders	Ribosomal protein S19 is associated with Diamond-Blackfan Anemia a rare genetic anemia caused by ribosomal protein mutations. This condition arises due to defective ribosome biogenesis leading to impaired erythropoiesis. Mutations in RPS19 reduce the ribosome's capacity to synthesize proteins specifically affecting red blood cell production. Additionally the protein is related to other ribosomal anomalies that connect to various bone marrow failure syndromes.

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.

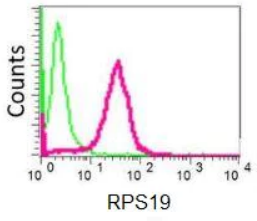
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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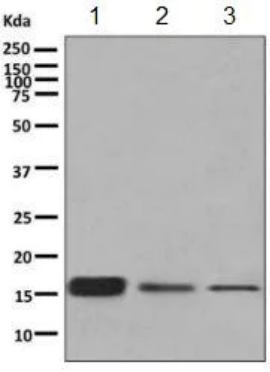
2 product images



Flow Cytometry (Intracellular) - Anti-RPS19 antibody [EPR10422] - BSA and Azide free (ab249237)

RPS19 Flow Cytometry (Intracellular) staining using rabbit Anti-RPS19 antibody

This data was developed using ab155994, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of permeabilized 293 cells labeling RPS19 with ab155994 at 1/10 dilution (red) compared with a rabbit IgG negative control (green).



Western blot - Anti-RPS19 antibody [EPR10422] - BSA and Azide free (ab249237)

This data was developed using ab155994, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-RPS19 antibody [EPR10422] (ab155994) at 1/1000 dilution

Lane 1:
293T cell lysate at 10 µg

Lane 2:
Caco-2 cell lysate at 10 µg

Lane 3:
K562 cell lysate at 10 µg

Secondary

All lanes:
Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 16 kDa

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