abcam

ab249120

Anti-S31 antibody [EPR10789(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	EPR10789(B)
Purification technique	Affinity purification

Reactivity data

ICC/IF

Not recommended

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Expected

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

Target data

See full target information 5-hydroxytryptamine receptor 1E

Function

G-protein coupled receptor for 5-hydroxytryptamine (serotonin) (PubMed:14744596, PubMed:1513320, PubMed:1608964, PubMed:1733778, PubMed:21422162, PubMed:33762731). Also functions as a receptor for various alkaloids and psychoactive substances (PubMed:14744596, PubMed:1513320, PubMed:1608964, PubMed:1733778, PubMed:21422162, PubMed:33762731). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors, such as adenylate cyclase (PubMed:14744596, PubMed:1513320, PubMed:1608964, PubMed:1733778, PubMed:21422162, PubMed:33762731). HTR1E is coupled to G(i)/G(o) G alpha proteins and mediates inhibitory neurotransmission by inhibiting adenylate cyclase activity (PubMed:33762731, PubMed:35610220).

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

ab249120 is the carrier-free version of ab154813.

Species reactivity

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

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	The S31 protein also known as the Influenza A virus proton channel M2 facilitates the pH regulation during viral infection. It functions as a transmembrane ion channel and plays an essential role in the viral uncoating process. S31 is a

	relatively small protein with a mass of roughly 97 amino acids. It is primarily expressed in the membranes of infected host cells during the lifecycle of the Influenza A virus contributing to the acidification necessary for viral RNA release.
Biological function summary	S31 is integral to the influenza virus replication process. It does not work alone but interacts with other viral proteins to form a functional ion channel complex. This complex is critical in modulating the internal pH of viral particles which subsequently assists in viral genome release into the host cell cytoplasm. The activity of S31 is pivotal for the successful entry of the virus into the host cell and its replication cycle.
Pathways	The functional role of S31 connects to the vesicular acidification and M2-mediated ion transport pathways. It is closely associated with the M1 protein of the Influenza A virus contributing to the virus's ability to hijack cellular machinery. These pathways facilitate the release of viral ribonucleoproteins into the cytoplasm by altering the endosomal pH important for the continuation of the viral replication process.
Associated diseases and disorders	S31 is directly associated with Influenza A infections causing seasonal flu outbreaks. Mutations in the S31 protein can lead to resistance to antiviral drugs such as amantadine complicating treatment strategies. It connects to the M1 protein through the viral lifecycle impacting the efficiency of viral assembly and dissemination. Understanding the mechanism of S31 opens avenues for developing targeted therapeutics that inhibit viral propagation.

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

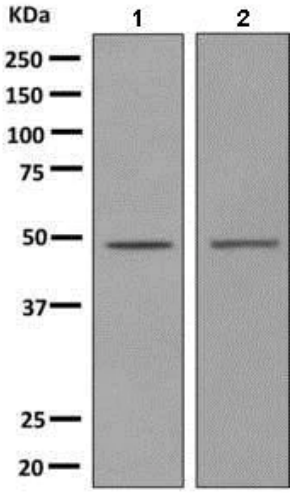
We do not recommend this combination. It is not covered by our product promise.

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:

1 product image



Western blot - Anti-S31 antibody [EPR10789(B)] - BSA and Azide free (ab249120)

S31 Western blot staining using rabbit Anti-S31 antibody

This data was developed using ab154813, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-S31 antibody [EPR10789(B)] (ab154813) at 1/1000 dilution

Lane 1:
Jurkat cell lysate at 10 µg

Lane 2:
SH-SY5Y cell lysate at 10 µg

Secondary

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

Predicted band size: 42 kDa

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