abcam

ab249660

Anti-GRASP1 antibody [EPR11703] - 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	EPR11703
Purification technique	Affinity purification

Reactivity data

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

IHC

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

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	-

IHC-FrFl

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information GRIPAP1

Function	Regulates the endosomal recycling back to the neuronal plasma membrane, possibly by connecting early and late recycling endosomal domains and promoting segregation of recycling endosomes from early endosomal membranes. Involved in the localization of recycling endosomes to dendritic spines, thereby playing a role in the maintenance of dendritic spine morphology. Required for the activity-induced AMPA receptor recycling to dendrite membranes and for long-term potentiation and synaptic plasticity (By similarity). GRASP-1 C-terminal chain. Functions as a scaffold protein to facilitate MAP3K1/MEKK1-mediated activation of the JNK1 kinase by phosphorylation, possibly by bringing MAP3K1/MEKK1 and JNK1 in close proximity.

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

ab249660 is the carrier-free version of ab171940.

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	GRASP1 also known as GRIP1-associated protein 1 is a scaffold protein involved in trafficking in neurons. It is part of the GRIP (Glutamate Receptor Interacting Protein) family and has a molecular weight of about 90 kDa. GRASP1 is expressed in the brain especially in areas such as the hippocampus and cortex. Its function includes facilitating the transport and stability of proteins at synaptic sites playing a role in synaptic plasticity and signaling.
Biological function summary	GRASP1 interacts with other proteins to modulate the assembly and function of the AMPA receptor complex at synapses. It is important for proper neuronal signaling and communication as it organizes the cellular machinery required for synaptic strength. GRASP1 works as part of the AMPA receptor complex affecting neurotransmitter regulation and synaptic transmission efficiency. This protein's role in regulating synaptic receptor composition influences learning and memory processes in the brain.
Pathways	GRASP1 integrates into the glutamatergic signaling pathway impacting neural communication and plasticity. It is associated with regulating the trafficking pathways of AMPA receptors important for excitatory neurotransmission. GRASP1 interacts with proteins like GRIP1 and PICK1 which help in maintaining the receptor composition at synaptic junctions. These interactions sustain the dynamic

	modulation of synaptic strength an essential component of the nervous system's flexibility.
Associated diseases and disorders	GRASP1 connects to neurodegenerative disorders like Alzheimer's disease. Changes in its function can contribute to synaptic dysfunction observed in such conditions. GRASP1 has been linked to proteins involved in neurotransmitter regulation and its dysregulation may influence the pathology of synaptic failure. In addition altered expression or function of GRASP1 has been associated with certain cognitive disorders further implicating its significance in maintaining synaptic 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

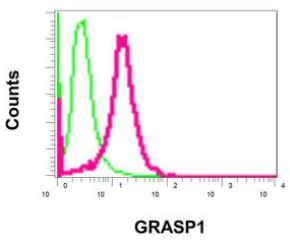
We do not recommend this combination. It is not covered by our product promise.

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.

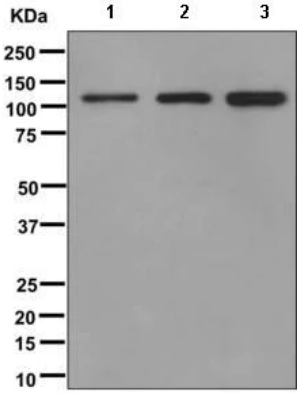
2 product images



Flow Cytometry (Intracellular) - Anti-GRASP1 antibody [EPR11703] - BSA and Azide free (ab249660)

GRASP1 Flow Cytometry (Intracellular) staining using rabbit Anti-GRASP1 antibody

This data was developed using ab171940, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of permeabilized Hela labeling GRASP1 with ab171940 at 1/10 (red) or a rabbit IgG (negative) (green).



Western blot - Anti-GRASP1 antibody [EPR11703] - BSA and Azide free (ab249660)

GRASP1 Western blot staining using rabbit Anti-GRASP1 antibody

This data was developed using ab171940, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-GRASP1 antibody [EPR11703] (ab171940) at 1/10000 dilution

Lane 1:
Human fetal brain tissue lysate at 10 µg

Lane 2:
HepG2 cell line lysate at 10 µg

Lane 3:
HeLa cell line lysate at 10 µg

Developed using the ECL technique.

Predicted band size: 96 kDa

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