abcam

ab171940

Anti-GRASP1 antibody [EPR11703]

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	EPR11703
Purification technique	Affinity purification Protein A
Concentration	0.381 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

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	1/10000 - 1/50000
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	1/10 - 1/50
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 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	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	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

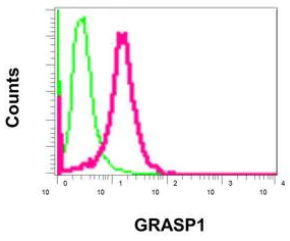
We do not recommend this combination. It is not covered by our product promise.

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.

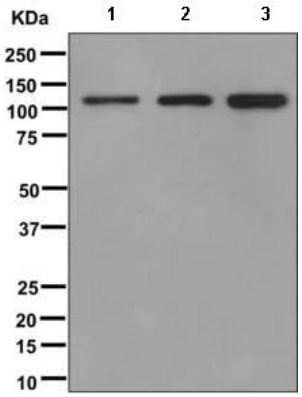
2 product images



Flow Cytometry (Intracellular) - Anti-GRASP1 antibody [EPR11703] (ab171940)

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

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] (ab171940)

GRASP1 Western blot staining using rabbit Anti-GRASP1 antibody

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'.