abcam

ab249824

Anti-GRASP65 antibody [EPR12439] - 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	EPR12439
Purification technique	Affinity purification
Concentration	1.037 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-

Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information GORASP1

Function

Key structural protein of the Golgi apparatus (PubMed:33301566). The membrane cisternae of the Golgi apparatus adhere to each other to form stacks, which are aligned side by side to form the Golgi ribbon (PubMed:33301566). Acting in concert with GORASP2/GRASP55, is required for the formation and maintenance of the Golgi ribbon, and may be dispensable for the formation of stacks (PubMed:33301566). However, other studies suggest that GORASP1 plays an important role in assembly and membrane stacking of the cisternae, and in the reassembly of Golgi stacks after breakdown during mitosis (By similarity). Caspase-mediated cleavage of GORASP1 is required for fragmentation of the Golgi during

apoptosis (By similarity). Also mediates, via its interaction with GOLGA2/GM130, the docking of transport vesicles with the Golgi membranes (PubMed:16489344). Mediates ER stress-induced unconventional (ER/Golgi-independent) trafficking of core-glycosylated CFTR to cell membrane (PubMed:21884936).

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

ab249824 is the carrier-free version of ab174834.

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	GRASP65 also known as Golgi reassembly stacking protein 65 is an important Golgi apparatus-associated protein. It weighs approximately 74 kDa and is expressed predominantly in mammalian cells. GRASP65 localizes to the cis-Golgi cisternae performing functions necessary for preserving the Golgi structure and facilitating protein trafficking. This protein plays a role in maintaining the Golgi ribbon during the cell cycle which is essential for proper cellular operation.
Biological function summary	GRASP65 participates in key processes related to Golgi stack organization and structure. It forms a complex with other Golgi proteins acting as an important scaffold protein during membrane tethering and linking adjacent Golgi membranes. GRASP65 influences Golgi dynamics by regulating Golgi stacking and membrane fusion events which are essential processes for the normal functioning of the secretory pathway.
Pathways	GRASP65 integrates into the mitotic Golgi fragmentation pathway and also influences the ER-to-Golgi transport pathway. It interacts with proteins such as GM130 and forms a bridge between vesicles and Golgi membranes influencing vesicle tethering and cisternal formation. In these roles GRASP65 helps coordinate Golgi disassembly and reassembly processes that are important during cell division to ensure proper Golgi inheritance among daughter cells.
Associated diseases and disorders	GRASP65 displays relationships with certain neurodegenerative and cancerous conditions. Dysfunctional GRASP65 activity associates with Alzheimer's disease-related pathologies potentially linked through proteins such as tau which aggregates during disease progression. It also connects to certain cancers by misregulating Golgi structure suggesting a role in improper cell cycle control. Understanding GRASP65's function and regulation could offer insights into therapeutic strategies for these diseases.

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

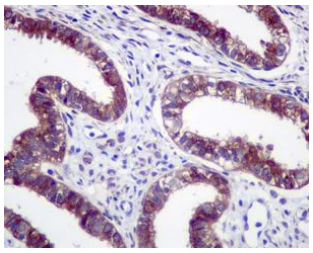
We do not recommend this combination. It is not covered by our product promise.

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.

6 product images

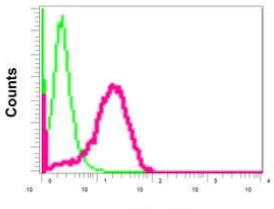


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GRASP65 antibody [EPR12439] - BSA and Azide free (ab249824)

GRASP65 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-GRASP65 antibody

This data was developed using ab174834, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human uterus tissue, labeling GRASP65 with ab174834 at 1/50 dilution.

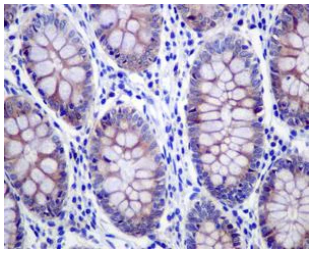
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-GRASP65 antibody [EPR12439] - BSA and Azide free (ab249824)

GRASP65 Flow Cytometry (Intracellular) staining using rabbit Anti-GRASP65 antibody

This data was developed using ab174834, the same antibody clone in a different buffer formulation.
Intracellular Flow Cytometry analysis of permeabilized HeLa cells labeling GRASP65 with ab174834 at 1/10 dilution (red), or negative control rabbit IgG (green).

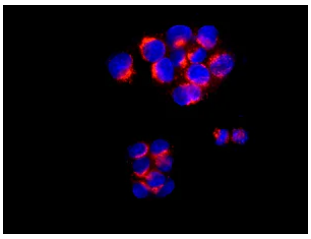


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GRASP65 antibody [EPR12439] - BSA and Azide free (ab249824)

GRASP65 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-GRASP65 antibody

This data was developed using ab174834, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human colon tissue, labeling GRASP65 with ab174834 at 1/50 dilution.

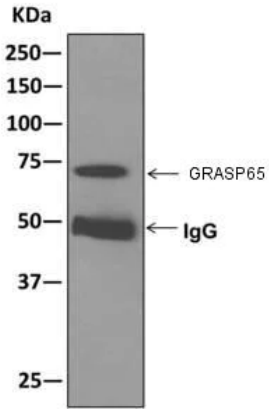
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-GRASP65 antibody [EPR12439] - BSA and Azide free (ab249824)

GRASP65 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-GRASP65 antibody

This data was developed using ab174834, the same antibody clone in a different buffer formulation.
Immunofluorescent analysis of HepG2 cells, labeling GRASP65 with ab174834 at 1/100 dilution (red). DAPI nuclear staining (blue).



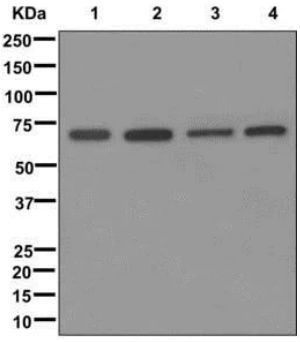
Immunoprecipitation - Anti-GRASP65 antibody [EPR12439] - BSA and Azide free (ab249824)

This data was developed using ab174834, the same antibody clone in a different buffer formulation.
Western blot analysis on immunoprecipitation pellet from HeLa cell lysate labeling GRASP65, immunoprecipitated using ab174834 at 1/10 dilution.

All lanes:
Immunoprecipitation - Anti-GRASP65 antibody [EPR12439] - C-terminal (ab174834)

Developed using the ECL technique.

Predicted band size: 46 kDa



Western blot - Anti-GRASP65 antibody [EPR12439] - BSA and Azide free (ab249824)

This data was developed using ab174834, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-GRASP65 antibody [EPR12439] - C-terminal (ab174834) at 1/1000 dilution

Lane 1:
293T cell lysate at 10 µg

Lane 2:
HeLa cell lysate at 10 µg

Lane 3:
HepG2 cell lysate at 10 µg

Lane 4:
MCF7 cell lysate at 10 µg

Secondary

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

Developed using the ECL technique.

Predicted band size: 46 kDa

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