

GRASP65 Rabbit pAb

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Catalog # AP58755

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9BQQ3
Reactivity	Rat
Predicted	Human, Mouse, Dog, Pig, Horse, Rabbit, Xenopus
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46482
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GRASP65
Epitope Specificity	1-100/440
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Golgi apparatus, cis-Golgi network membrane;
SIMILARITY	Belongs to the GORASP family. Contains 1 PDZ (DHR) domain.
SUBUNIT	Homodimer. Forms higher order oligomers under interphase but not mitotic conditions. Dimers of the protein on one membrane might be able to interact with dimers on another and so stack cisternae. Interacts with the C-terminus of GM130 under both mitotic and non-mitotic conditions. The interaction is critical for the correct targeting of both proteins to the cis-Golgi. The complex binds to the vesicle docking protein p115. Interacts with TMED2 and TMED3 (By similarity).
Post-translational modifications	Phosphorylated by CDC2/B1 and PLK kinases during mitosis. Phosphorylation cycle correlates with the cisternal stacking cycle. Phosphorylation of the homodimer prevents the association of dimers into higher order oligomers, leading to cisternal unstacking. Target for caspase-3 cleavage during apoptosis. The cleavage contributes to Golgi fragmentation and occurs very early in the execution phase of apoptosis (By similarity).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Stacking factor involved in the postmitotic assembly of Golgi stacks from mitotic Golgi fragments. Key structural protein required for the maintenance of the Golgi apparatus integrity: its caspase-mediated cleavage is required for fragmentation of the Golgi during apoptosis. Also mediates, via its interaction with GM130, the docking of transport vesicles with the Golgi membranes.

Additional Information

Gene ID	64689
Other Names	Golgi reassembly-stacking protein 1, Golgi peripheral membrane protein p65,

Golgi phosphoprotein 5, GOLPH5, Golgi reassembly-stacking protein of 65 kDa, GRASP65, GORASP1, GOLPH5, GRASP65

Dilution

IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name

GORASP1

Synonyms

GOLPH5, GRASP65

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](#)).

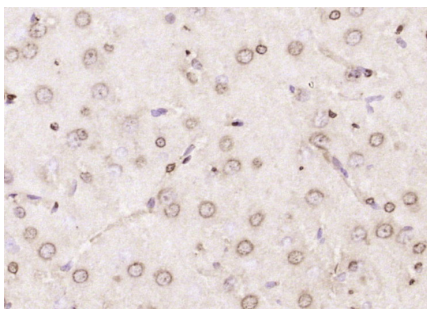
Cellular Location

Golgi apparatus, cis-Golgi network membrane; Peripheral membrane protein; Cytoplasmic side. Endoplasmic reticulum- Golgi intermediate compartment membrane

Background

Stacking factor involved in the postmitotic assembly of Golgi stacks from mitotic Golgi fragments. Key structural protein required for the maintenance of the Golgi apparatus integrity: its caspase-mediated cleavage is required for fragmentation of the Golgi during apoptosis. Also mediates, via its interaction with GM130, the docking of transport vesicles with the Golgi membranes.

Images



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GRASP65) Polyclonal Antibody, Unconjugated (AP58755) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.