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GOSR1 Rabbit pAb

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Catalog # AP55181

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	O95249
Reactivity	Mouse, Rat
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28613
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GOSR1/GS28
Epitope Specificity	151-250/250
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	Cell Membrane, Endoplasmic reticulum and Golgi Apparatus
SIMILARITY	Belongs to the GOSR1 family.
SUBUNIT	Component of several multiprotein Golgi SNARE complexes. Identified in a SNARE complex with BET1, STX5 and YKT6, in a SNARE complex with BET1L, STX5 and YKT6, in a SNARE complex with STX5, GOSR2, SEC22B and BET1, and in complex with STX5 and COG3. Interacts with GABARAPL2 (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	In eukaryotic cells, the Golgi apparatus receives newly synthesized proteins from the endoplasmic reticulum and delivers them after covalent modification to their destination in the cell. For membrane-directed proteins this process is believed to be carried out via vesicular transport. Correct vesicular transport is determined by specific pairing of vesicle-associated SNAREs (v-SNAREs) with those on the target membrane (t-SNAREs). This complex then recruits soluble NSF attachment proteins (SNAPs) and N-ethylmaleimide-sensitive factor (NSF) to form the highly stable SNAP receptor (SNARE) complex. The formation of a SNARE complex pulls the vesicle and target membranes together and may provide the energy to drive the fusion of the lipid bilayers. Golgi SNARE 27 kDa (GS27) and GS28 belong to the SNARE protein family and are important trafficking proteins between the endoplasmic reticulum and the Golgi and between Golgi subcompartments. GS27 and GS28 both exist as cytoplasmically oriented integral membrane proteins. The human GS27 gene, which maps to chromosome 17q21, is located near a locus implicated in familial essential hypertension, indicating that it is a potential candidate gene for this disease. The human GS28 gene maps to chromosome 17q11.

Additional Information

Gene ID	9527
Other Names	Golgi SNAP receptor complex member 1, 28 kDa Golgi SNARE protein, 28 kDa cis-Golgi SNARE p28, GOS-28, GOSR1, GS28
Dilution	WB=1:500-2000,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

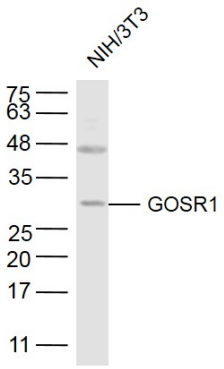
Name	GOSR1
Synonyms	GS28
Function	Involved in transport from the ER to the Golgi apparatus as well as in intra-Golgi transport. It belongs to a super-family of proteins called t-SNAREs or soluble NSF (N-ethylmaleimide-sensitive factor) attachment protein receptor. May play a protective role against hydrogen peroxide induced cytotoxicity under glutathione depleted conditions in neuronal cells by regulating the intracellular ROS levels via inhibition of p38 MAPK (MAPK11, MAPK12, MAPK13 and MAPK14). Participates in docking and fusion stage of ER to cis-Golgi transport. Plays an important physiological role in VLDL-transport vesicle-Golgi fusion and thus in VLDL delivery to the hepatic cis-Golgi.
Cellular Location	Golgi apparatus membrane; Single-pass type IV membrane protein. Note=Localizes throughout the Golgi apparatus, with lowest levels in the trans-Golgi network (By similarity). Enriched on vesicular components at the terminal rims of the Golgi. Found in Golgi microtubules at low temperature (15 degrees Celsius).

Background

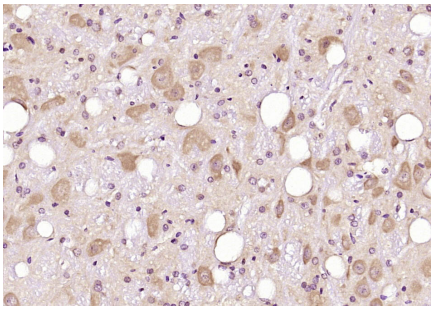
In eukaryotic cells, the Golgi apparatus receives newly synthesized proteins from the endoplasmic reticulum and delivers them after covalent modification to their destination in the cell. For membrane-directed proteins this process is believed to be carried out via vesicular transport. Correct vesicular transport is determined by specific pairing of vesicle-associated SNAREs (v-SNAREs) with those on the target membrane (t-SNAREs). This complex then recruits soluble NSF attachment proteins (SNAPs) and N-ethylmaleimide-sensitive factor (NSF) to form the highly stable SNAP receptor (SNARE) complex. The formation of a SNARE complex pulls the vesicle and target membranes together and may provide the energy to drive the fusion of the lipid bilayers. Golgi SNARE 27 kDa (GS27) and GS28 belong to the SNARE protein family and are important trafficking proteins between the endoplasmic reticulum and the Golgi and between Golgi subcompartments. GS27 and GS28 both exist as cytoplasmically oriented integral membrane proteins. The human GS27 gene, which maps to chromosome 17q21, is located near a locus implicated in familial essential hypertension, indicating that it is a potential candidate gene for this disease. The human GS28 gene maps to chromosome 17q11.

Images

Sample:
NIH/3T3 Cell Lysate at 40 ug
Primary: Anti-GOSR1 (AP55181) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000



dilution
Predicted band size: 29 kD
Observed band size: 29 kD



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 (GOSR1) Polyclonal Antibody, Unconjugated (AP55181) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.