abcam

ab53288

Anti-GOSR1/GS28 antibody [EP1768Y]

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	EP1768Y
Purification technique	Affinity purification Protein A
Concentration	1.183 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	**For unpurified use at 1/250 - 1/500.**

Species	Rat
Dilution info	1/1000
Notes	**For unpurified use at 1/250 - 1/500.**

Species	Human
Dilution info	1/1000
Notes	**For unpurified use at 1/250 - 1/500.**

ICC/IF

Tested

Species	Mouse
Dilution info	1/150
Notes	**For unpurified use at 1/50 - 1/100.**

Species	Human
Dilution info	1/150
Notes	**For unpurified use at 1/50 - 1/100.**

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/120
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. For unpurified use at 1/30.

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/100
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information GOSR1

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.

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, Stable for 12 months at -20°C

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	GOSR1 also known as GS28 is a Golgi SNAP receptor complex member and has a mass of approximately 28 kDa. It functions mechanically in the membrane trafficking process facilitating the fusion of transport vesicles with the Golgi apparatus. GOSR1 localizes mainly to the Golgi apparatus and is expressed in numerous human tissues including the liver brain and pancreas. It participates in the assembly of the SNARE complex which is important for vesicle docking and fusion.
Biological function summary	GOSR1 is involved in the intracellular transport system ensuring the proper sorting and distribution of proteins within cells. It is a component of the soluble N-ethylmaleimide-sensitive factor attachment protein receptor (SNARE) complex working with other SNARE proteins to mediate vesicle fusion events. This

	interaction plays a significant role in maintaining the functionality and organization of the Golgi network impacting protein processing and trafficking.
Pathways	GOSR1 plays a role in intracellular transport and protein processing pathways influencing how proteins are modified and directed within the cell. It interacts with other proteins such as syntaxin 5 and Bet1 to facilitate the fusion of vesicles with the Golgi. This action integrates GOSR1 into the Golgi-to-endoplasmic reticulum retrograde transport pathway as well as anterograde transport which are essential for the maintenance of cellular protein homeostasis.
Associated diseases and disorders	Alterations in GOSR1 expression or function may relate to neurodegenerative conditions such as Parkinson's disease and metabolic disorders like diabetes. GOSR1's role in vesicle trafficking means its dysfunction can disrupt cellular homeostasis potentially leading to these diseases. It interacts with proteins such as alpha-synuclein in neurodegeneration and may influence insulin granule trafficking in metabolic disorders. Understanding GOSR1's involvement opens potential avenues for therapeutic approaches targeting these conditions.

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

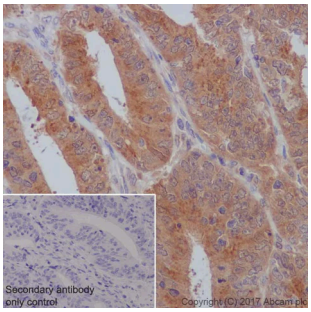
We do not recommend this combination. It is not covered by our product promise.

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.

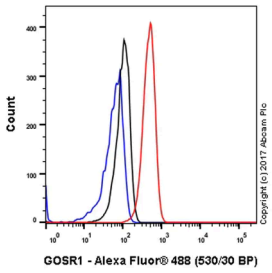
7 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GOSR1/GS28 antibody [EP1768Y] (ab53288)

GOSR1/GS28 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-GOSR1/GS28 antibody

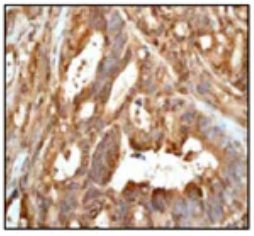
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human colon carcinoma tissue sections labeling GOSR1/GS28 with Purified ab53288 at 1:100 dilution (12.3 µg/ml). Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Flow Cytometry (Intracellular) - Anti-GOSR1/GS28 antibody [EP1768Y] (ab53288)

GOSR1/GS28 Flow Cytometry (Intracellular) staining using rabbit Anti-GOSR1/GS28 antibody

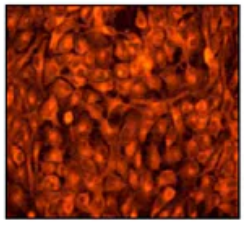
Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling GOSR1/GS28 with purified ab53288 at 1/120 dilution (10µg/ml) (red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GOSR1/GS28 antibody [EP1768Y] (ab53288)

GOSR1/GS28 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-GOSR1/GS28 antibody

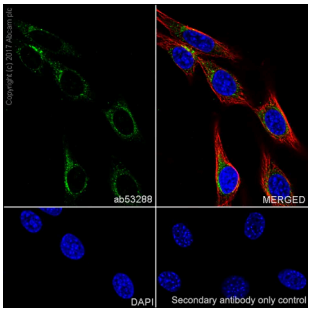
Human stomach carcinoma staining with unpurified ab53288 at 1/100 - 1/250 dilution



Immunocytochemistry/ Immunofluorescence - Anti-GOSR1/GS28 antibody [EP1768Y] (ab53288)

GOSR1/GS28 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-GOSR1/GS28 antibody

HeLa cells stained with unpurified ab53288 at 1/50 - 1/100 dilution

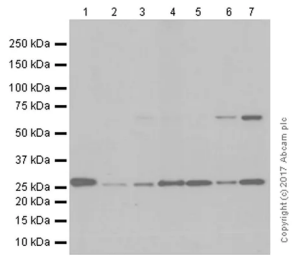


Immunocytochemistry/ Immunofluorescence - Anti-GOSR1/GS28 antibody [EP1768Y] (ab53288)

GOSR1/GS28 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-GOSR1/GS28 antibody

Immunocytochemistry/ Immunofluorescence analysis of NIH/3T3 (Mouse embryonic fibroblast) cells labeling GOSR1/GS28 with Purified ab53288 at 1:150 dilution. Cells were fixed in 100% Methanol. Cells were counterstained with None. ab150077 Goat anti rabbit IgG(Alexa Fluor® 488)

was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Western blot - Anti-GOSR1/GS28 antibody [EP1768Y] (ab53288)

Blocking and diluting buffer: 5% NFDM/TBST
All lanes:
Western blot - Anti-GOSR1/GS28 antibody [EP1768Y] (ab53288) at 1/1000 dilution

Lane 1:
SK-BR-3 (Human breast adenocarcinoma epithelial cell) whole cell lysates at 20 µg

Lane 2:
NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates at 20 µg

Lane 3:
Neuro-2a (Mouse neuroblastoma neuroblast) whole cell lysates at 20 µg

Lane 4:
PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysates at 20 µg

Lane 5:
C6 (Rat glial tumor glial cell) whole cell lysates at 20 µg

Lane 6:
SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysates at 20 µg

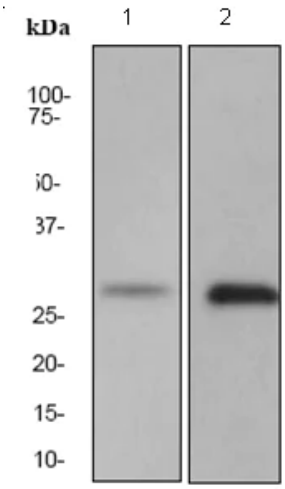
Lane 7:
HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 29 kDa

Observed band size: 29 kDa



Western blot - Anti-GOSR1/GS28 antibody [EP1768Y] (ab53288)

All lanes:
Western blot - Anti-GOSR1/GS28 antibody [EP1768Y] (ab53288) at 1/500 dilution

Lane 1:
SKBR-3 cell lysate at 10 µg

Lane 2:
3T3 cell lysate at 10 µg

Secondary

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

Predicted band size: 29 kDa

Observed band size: 29 kDa

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