Technical Data Sheet

Purified Mouse Anti-GS28

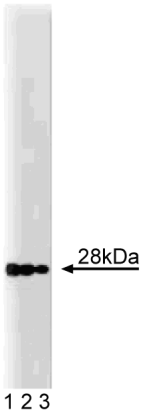
Product Information

Material Number:	**611185**
Size:	150 µg
Concentration:	250 µg/ml
Clone:	1/GS28
Immunogen:	Rat GS28 aa. 3-108
Isotype:	Mouse IgG2a
Reactivity:	QC Testing: Mouse Tested in Development: Human, Rat
Target MW:	28 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

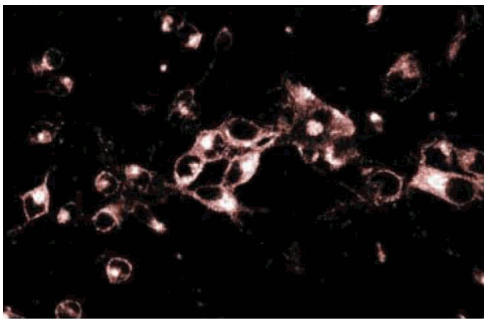
Description

Most vesicular fusion events require the function of N-ethylmaleimide-sensitive factor (NSF) and the soluble NSF attachment proteins (SNAPs). Their function is dependent upon the SNAP receptor (SNARE) family of proteins. The specificity of vesicle docking and fusion is mediated by specific interactions between v-SNAREs on vesicles and t-SNAREs on target membranes. GS28 (**G**olgi **S**NARE with a size of **28** kDa) is a SNARE that associates with the cis-Golgi and participates in trafficking between the ER and the Golgi and between Golgi compartments. The majority of GS28, the first 230 and 250 aa, is thought to be anchored to the membrane via the C-terminal hydrophobic tail, which is formed by the remaining 20 aa. GS28 and syntaxin 5, another SNARE, exist as a protein complex in the Golgi and this complex is important for the function of both proteins in ER-Golgi transport. The GS28/syntaxin 5 complex can be dissociated by α-SNAP and NSF. In addition, GS28 is thought to interact with α-SNAP when the GS28/syntaxin 5 complex is dissociated. Thus, GS28 is a SNARE protein that mediates, in complex with syntaxin 5, transport within the Golgi and between Golgi and ER.

This antibody is routinely tested by western blot analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Western blot analysis of GS28 on a RSV-3T3 lysate.
Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of the anti- GS28 antibody.



Immunoflourescence of rat neurons.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20° C.

BD Biosciences
bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit bdbiosciences.com/how_to_order/

BD Biosciences

Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development

Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Igs	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Igs	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Hamza I, Prohaska J, Gitlin JD. Essential role for Atox1 in the copper-mediated intracellular trafficking of the Menkes ATPase. *Proc Natl Acad Sci U S A.* 2003; 100(3):1215-1220.(Biology: Fluorescence microscopy, Immunofluorescence)

Lanoix J, Ouwendijk J, Stark A, et al. Sorting of Golgi resident proteins into different subpopulations of COPI vesicles: a role for ArfGAP1. *J Cell Biol.* 2001; 155(7):1199-1212.(Biology: Western blot)

Muller JM, Shorter J, Newman R, et al. Sequential SNARE disassembly and GATE-16-GOS-28 complex assembly mediated by distinct NSF activities drives Golgi membrane fusion. *J Cell Biol.* 2002; 157(7):1161-1173.(Biology: Immunoprecipitation, Western blot)

Subramaniam VN, Loh E, Hong W. N-Ethylmaleimide-sensitive factor (NSF) and alpha-soluble NSF attachment proteins (SNAP) mediate dissociation of GS28-syntaxin 5 Golgi SNAP receptors (SNARE) complex. *J Biol Chem.* 1997; 272(41):25441-25444.(Biology)

Subramaniam VN, Peter F, Philp R, Wong SH, Hong W. GS28, a 28-kilodalton Golgi SNARE that participates in ER-Golgi transport. *Science.* 1996; 272(5265):1161-1163.(Biology)