Technical Data Sheet

Purified Mouse Anti-GS15

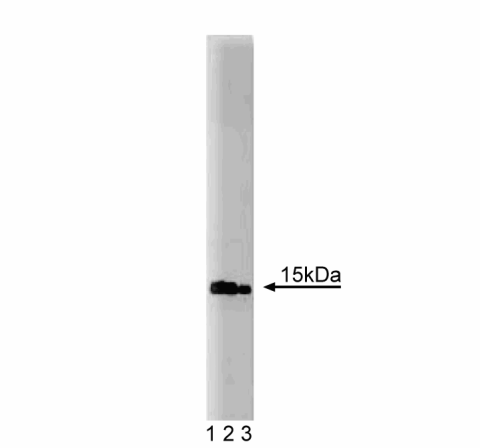
Product Information

Material Number:	**610960**
Alternate Name:	Golgi SNARE of 15 kDa
Size:	50 µg
Concentration:	250 µg/ml
Clone:	19/GS15
Immunogen:	Rat GS15 aa. 1-85
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Mouse, Rat, Dog, Frog
Target MW:	15 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

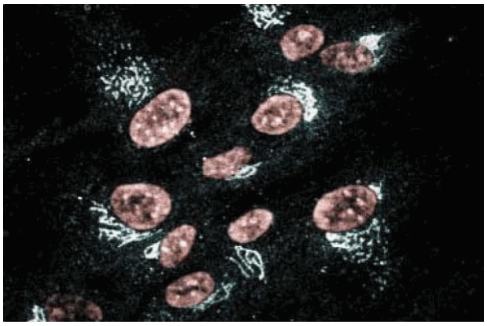
Description

Eukaryotic protein trafficking involves the packaging of target molecules into membranous vesicles that bud from a donor compartment, travel to a specific destination, fuse, and release their components into an acceptor compartment. Components of both the vesicle and the synaptic plasma membrane interact to form a fusion complex which mediates specific docking and fusion of vesicles. This complex contains NSF (N-ethyl-maleimide-sensitive factor), SNAPs (soluble NSF attachment proteins), and receptor proteins (SNAREs) that include synaptobrevin, synaptotagmin, syntaxin, and SNAP-25 (synaptosome-associated protein of 25 kDa). SNAP-25 and syntaxin are associated with the target plasma membrane (t-SNAREs), while synaptobrevin and synaptotagmin are vesicle-associated proteins (v-SNAREs). In Drosophila, protein transport from the ER to Golgi involves Bet1p, a v-SNARE. With 28% amino acid identity to Bet1p, GS15 (Golgi SNARE of 15 kDa) is widely expressed in rat tissues. It is an integral membrane protein of the Golgi apparatus and functions as a SNARE. Thus, GS15 is thought to be a novel SNARE that participates in ER-Golgi protein transport through an undefined process.

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 GS15 on a SW13 cell lysate (Human adrenal gland carcinoma; ATCC CCL-105).
Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the mouse anti- GS15 antibody.



Immunofluorescence staining of Human intestinal smooth muscle cells (HISM).

Preparation and Storage

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

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Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
611475	SW-13 Cell Lysate	500 µg	(none)
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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. 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.

References

Beckhelling C, Chang P, Chevalier S, Ford C, Houliston E. Pre-M phase-promoting factor associates with annulate lamellae in Xenopus oocytes and egg extracts. *Mol Biol Cell.* 2003; 14(3):1125-1137.(Biology: Electron microscopy)

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)

Shorter J, Beard MB, Seemann J, Dirac-Svejstrup AB, Warren G. Sequential tethering of Golgins and catalysis of SNAREpin assembly by the vesicle-tethering protein p115. *J Cell Biol.* 2002; 157(1):45-62.(Biology: Western blot)

Xu Y, Martin S, James DE, Hong W. GS15 forms a SNARE complex with syntaxin 5, GS28, and Ykt6 and is implicated in traffic in the early cisternae of the Golgi apparatus. *Mol Biol Cell.* 2002; 13(10):3493-3507.(Biology: Electron microscopy, Immunofluorescence, Immunoprecipitation, Western blot)

Xu Y, Wong SH, Zhang T, Subramaniam VN, Hong W. GS15, a 15-kilodalton Golgi soluble N-ethylmaleimide-sensitive factor attachment protein receptor (SNARE) homologous to rbet1. *J Biol Chem.* 1997; 272(32):20162-20166.(Biology)