Technical Data Sheet

Purified Mouse Anti-SNAP-25

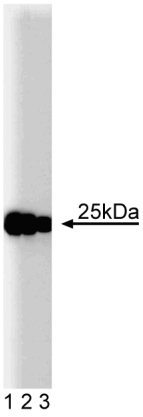
Product Information

Material Number:	**610367**
Alternate Name:	Synaptosomal Associated Protein of 25 kD
Size:	150 µg
Concentration:	250 µg/ml
Clone:	20/SNAP-25
Immunogen:	Mouse SNAP-25 aa. 8-29
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Rat Tested in Development: Mouse
Target MW:	25 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

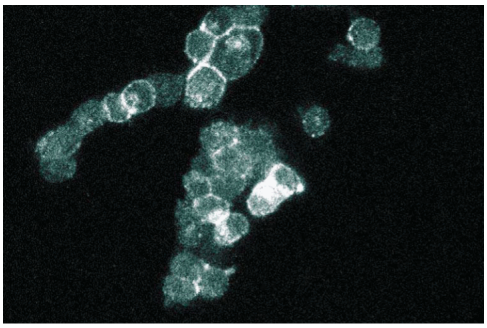
Description

Release of neurotransmitters from neurons is regulated by exocytosis of synaptic vesicles. This exocytosis is mediated by a complex consisting of membrane components of both the synaptic vesicle and the synaptic plasma membrane. The fusion complex consists of the soluble NSF (N-ethyl-maleimide-sensitive factor) and SNAPs (soluble NSF attachment proteins), along with the receptor proteins (known as SNAREs) synaptobrevin, synaptotagmin, syntaxin, and SNAP-25 (synaptosomal-associated protein of 25 kDa- the name is coincidental to the previously mentioned "SNAP" terminology). SNAP-25 and syntaxin are plasmalemmal proteins (designated as t-SNAREs) while synaptobrevin and synaptotagmin are vesicular proteins (designated as v-SNAREs). These four proteins are thought to constitute an initial SNARE docking complex for regulated exocytosis. SNAP-25 lacks a transmembrane domain, but is linked to the membrane by palmitoylated cysteine residues in the central region of the molecule.

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 SNAP-25 on a rat cerebrum lysate**. Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of the mouse anti-SNAP-25 antibody.*



Immunofluorescence staining of PC12 cells (Rat neuroblastoma; ATCC CRL-1721).

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
Immunohistochemistry	Not Recommended
Immunoprecipitation	Not Recommended

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
611463	Rat Cerebrum 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

Chapman ER, An S, Barton N, Jahn R. SNAP-25, a t-SNARE which binds to both syntaxin and synaptobrevin via domains that may form coiled coils. *J Biol Chem.* 1994; 269(44):27427-27432.(Biology)

Hasegawa H, Zinsser S, Rhee Y, Vik-Mo EO, Davanger S, Hay JC. Mammalian ykt6 is a neuronal SNARE targeted to a specialized compartment by its profilin-like amino terminal domain. *Mol Biol Cell.* 2003; 14(2):698-720.(Biology)

Martinez-Arca S, Alberts P, Zahraoui A, Louvard D, Galli T. Role of tetanus neurotoxin insensitive vesicle-associated membrane protein (TI-VAMP) in vesicular transport mediating neurite outgrowth. *J Cell Biol.* 2000; 149(4):889-900.(Biology: Immunofluorescence, Immunoprecipitation, Western blot)

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Torii S, Zhao S, Yi Z, Takeuchi T, Izumi T. Granuphilin modulates the exocytosis of secretory granules through interaction with syntaxin 1a. *Mol Cell Biol.* 2002; 22(15):5518-5526.(Biology: Western blot)

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