



Product Information Sheet

Polyclonal Anti- Synaptosome-associated protein of 25,000 daltons, **SNAP25**

Catalogue No. PA1315

Lot No. 03101

Ig type rabbit IgG

Size 100µg/vial

Specificity

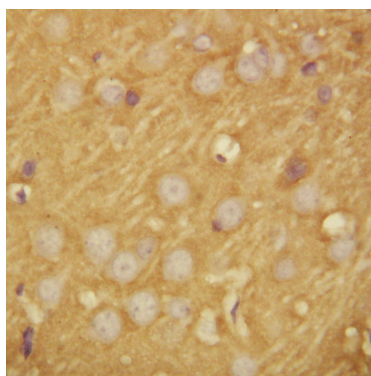
Rat, mouse.

No cross reactivity with other proteins.

Recommended application

Western blot

Immunohistochemistry(P)



Immunogen

A synthetic peptide corresponding to a sequence at the C-terminal of human SNAP25, identical to the related rat and mouse sequence.

Purity

Immunogen affinity purified.

Application

	Concentration	Tested Species	Concluded Species	Antigen Retrieval
WB	1µg/ml	Rat	Ms	-
IHC-P	1µg/ml	Rat	Ms	-
IHC-F	-	-	-	-
ICC	-	-	-	-

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Reconstitution

0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for longer time.

To reorder contact us at:

Antagene, Inc.

Toll Free: 1(866)964-2589

email: Info@antageneinc.com

BACKGROUND

Synaptosome-associated protein of 25,000 daltons also known as SNAP-25 is a protein which in humans encodes a 25-kD protein of 206 amino acids. It was first investigated as a neuron-specific gene preferentially expressed in mouse hippocampus. The tSNARE (the target-membrane soluble

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NSF-attachment protein receptor, where NSF is N-ethylmaleimide-sensitive fusion protein) synaptosomal-associated protein of 25 kDa (SNAP-25) is expressed in pancreatic B-cells and its cleavage by botulinum neurotoxin E (BoNT/E) abolishes stimulated secretion of insulin. In the nervous system, two SNAP-25 isoforms (a and b) have been described, which are produced by alternative splicing.¹ Nagy et al. (2004) identified mammalian Snap25a and Snap25b as targets of protein kinase A, a key regulator of neurosecretion that primes slowly releasable pools and readily releasable pools of secretory vesicles.² SNAP-25 inhibits P/Q- and L-type voltage-gated calcium channels located presynaptically³ and interacts with the synaptotagmin C2B domain in Ca²⁺-independent fashion⁴. In glutamatergic synapses SNAP-25 decreases the Ca²⁺ responsiveness, while it is naturally absent in GABAergic synapses⁵.

REFERENCE

1. Gonelle-Gispert, C.; Halban, P. A.; Niemann, H.; Palmer, M.; Catsicas, S.; Sadoul, K. : SNAP-25a and -25b isoforms are both expressed in insulin-secreting cells and can function in insulin secretion. *Biochem. J.* 339: 159-165, 1999.
2. Nagy, G.; Reim, K.; Matti, U.; Brose, N.; Binz, T.; Rettig, J.; Neher, E.; Sorensen, J. B. : Regulation of releasable vesicle pool sizes by protein kinase A-dependent phosphorylation of SNAP-25. *Neuron* 41: 417-429, 2004.
3. Hodel A (1998). "SNAP-25". *The International Journal of Biochemistry & Cell Biology* 30 (10): 1069–1073.
4. Chapman ER (2002). "Synaptotagmin: A Ca²⁺ sensor that triggers exocytosis?". *Nature Reviews Molecular Cell Biology* 3: 498–508.
5. Pozzi D, Verderio C, Patti L, Grumelli C, Inverardi F, Frassoni C, Bonanno G, Matteoli M (2004). "SNAP-25 modulation of calcium dynamics underlies differences in GABAergic and glutamatergic responsiveness to depolarization". *Neuron* 41 (4): 599–610.