

Anti-SNAP25 Antibody
Catalog # ABO10640**Specification**

Anti-SNAP25 Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P60880
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Synaptosomal-associated protein 25(SNAP25) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

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

Anti-SNAP25 Antibody - Additional Information

Gene ID 6616

Other Names

Synaptosomal-associated protein 25, SNAP-25, Super protein, SUP, Synaptosomal-associated 25 kDa protein, SNAP25, SNAP

Calculated MW

23315 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Rat, Human, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Rat, Human, Mouse

Subcellular Localization

Cytoplasm, perinuclear region . Cell membrane ; Lipid-anchor. Cell junction, synapse, synaptosome. Membrane association requires palmitoylation. Expressed throughout cytoplasm, concentrating at the perinuclear region. Colocalizes with KCNB1 at the cell membrane (By similarity). .

Tissue Specificity

Neurons of the neocortex, hippocampus, piriform cortex, anterior thalamic nuclei, pontine nuclei, and granule cells of the cerebellum.

Protein Name

Synaptosomal-associated protein 25(SNAP-25)

Contents

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

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human SNAP25(186-200aa DSNKTRIDEANQRAT), identical to the related rat and mouse sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

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 a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the SNAP-25 family.

Anti-SNAP25 Antibody - Protein Information**Name** SNAP25**Synonyms** SNAP**Function**

t-SNARE involved in the molecular regulation of neurotransmitter release. May play an important role in the synaptic function of specific neuronal systems. Associates with proteins involved in vesicle docking and membrane fusion. Regulates plasma membrane recycling through its interaction with CENPF. Modulates the gating characteristics of the delayed rectifier voltage-dependent potassium channel KCNB1 in pancreatic beta cells.

Cellular Location

Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:P60879}. Cell membrane {ECO:0000250|UniProtKB:P60881}; Lipid-anchor {ECO:0000250|UniProtKB:P60879}. Synapse, synaptosome {ECO:0000250|UniProtKB:P60879}. Photoreceptor inner segment {ECO:0000250|UniProtKB:P60879}. Note=Membrane association requires palmitoylation. Expressed throughout cytoplasm, concentrating at the perinuclear region. Colocalizes with KCNB1 at the cell membrane (By similarity). Colocalizes with PLCL1 at the cell membrane (By similarity). {ECO:0000250|UniProtKB:P60879, ECO:0000250|UniProtKB:P60881}

Tissue Location

Neurons of the neocortex, hippocampus, piriform cortex, anterior thalamic nuclei, pontine nuclei, and granule cells of the cerebellum

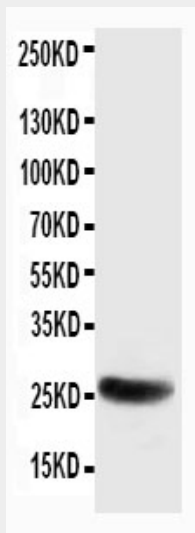
Anti-SNAP25 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

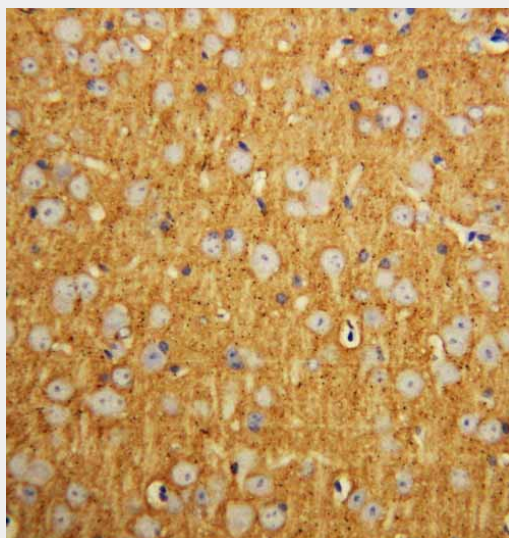
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)

- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-SNAP25 Antibody - Images



Anti-SNAP25 antibody, ABO10640, Western blottingWB: Rat Brain Tissue Lysate



Anti-SNAP25 antibody, ABO10640, IHC(P)IHC(P): Rat Brain Tissue

Anti-SNAP25 Antibody - 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 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. 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. SNAP-25 inhibits P/Q- and L-type voltage-gated calcium

channels located presynaptically and interacts with the synaptotagmin C2B domain in Ca^{2+} -independent fashion. In glutamatergic synapses SNAP-25 decreases the Ca^{2+} responsiveness, while it is naturally absent in GABAergic synapses.