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SNAP25 Rabbit mAb

Catalog # AP76897

Product Information

Application	WB, FC
Primary Accession	P60880
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	23315

Additional Information

Gene ID	6616
Other Names	SNAP25
Dilution	WB~~1:1000 FC~~1:10~50
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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

Background

SNAP25 forms a core complex with the SNARE proteins syntaxin and synaptobrevin to mediate synaptic vesicle fusion with the plasma membrane during Ca2+-dependent exocytosis. This complex is responsible for exocytosis of the neurotransmitter γ-aminobutyric acid (GABA). Neurotransmitter release is inhibited by proteolysis of SNAP25 by botulinum toxins A and E. SNAP25 plays a secondary role as a Q-SNARE involved in endosome fusion; the protein is associated with genetic susceptibility to attention-deficit hyperactivity disorder (ADHD).