

Product datasheet for **SM1457P**

SNAP25 Mouse Monoclonal Antibody [Clone ID: SP12]

Product data:

Product Type:	Primary Antibodies
Clone Name:	SP12
Applications:	ELISA, IHC, WB
Recommended Dilution:	ELISA. Western Blot: 1/500-1/5000. Immunohistochemistry on Paraffin Sections: 1/2000-1/5000. This product does not require protein digestion pre-treatment of paraffin sections and does not require antigen retrieval using heat treatment prior to staining of paraffin sections. <i>Positive Control Tissue:</i> Brain.
Reactivity:	Hamster, Human, Porcine, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Crude Human synaptic immunoprecipitate.
Specificity:	This antibody appears to recognize the pre-synaptic protein SNAP-25, an antigen of 26-27kD Molecular Weight. It will recognise SNAP-25 fusion protein from COS cells, but not the fusion protein from bacterial systems. Research studies have used this antibody to study the distribution of synaptic changes in the hippocampus of patients with medically refractory temporal lobe epilepsy. (1,3,8)
Formulation:	PBS, pH 7.2 containing 0.09% Sodium Azide as preservative. State: Purified State: Liquid purified IgG fraction.
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein A.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.



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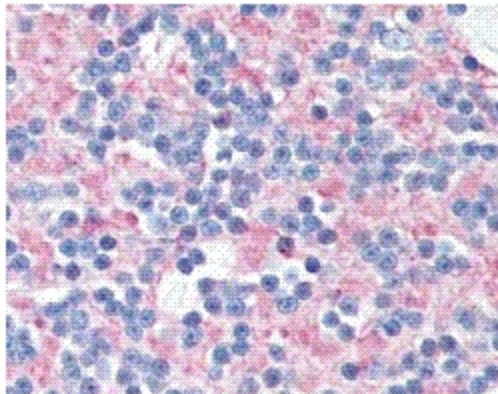
Gene Name: synaptosome associated protein 25kDa

Database Link: [Entrez Gene 6616 Human P60880](#)

Background: SNAP25 is a soluble protein of 25 kDa which plays a key role in vesicle membrane fusion events with the plasma membrane. This protein was originally discovered to be enriched in subsets of neurons in the brain and displays a presynaptic pattern of expression. The membrane proteins SNAP25, synaptobrevin, and syntaxin form the core of a ubiquitous membrane fusion machine that interacts with the soluble proteins N-ethylmaleimide-sensitive factor (NSF) and alpha-SNAP. Functional interactions have been demonstrated to exist between SNAP-25, syntaxin, and the synaptic protein interaction site on voltage-sensitive L- and N-type calcium channels. SNAP-25 has been shown to be required for synaptic vesicle fusion with the plasma membrane during release of nerve growth factor (NGF). Regulated exocytosis of cortical granule secretion in fertilized eggs and membrane fusion events in neurons and endocrine cells is mediated by SNAP-25 in a calcium-dependent mechanism. SNAP25 protein levels have been shown to be elevated in prolactinoma and growth hormone (GH)/prolactin (PRL) tumor cells while reduced SNAP-25 protein expression has been observed between schizophrenic and normal hippocampal cells. Altered patterns of SNAP-25 expression have also been observed in the inferior temporal cortex and prefrontal association cortex between normal brains and brains from individuals affected with schizophrenia. SNAP25 accumulation due to cytoskeletal dysfunction is also observed in the swollen axons of the white matter of individuals with severe Alzheimer's dementia.

Synonyms: SNAP-25, SUP, SNAP, Super Protein, RIC4, ric-4

Product images:



Immunohistochemistry: SNAP25 antibody staining of Human Cerebellar Granular Neurons.