

Basic Information

Product Name	Anti-SNAP25 Antibody	
Gene Name	SNAP25	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human SNAP25, identical to the related rat and mouse sequences.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	25 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

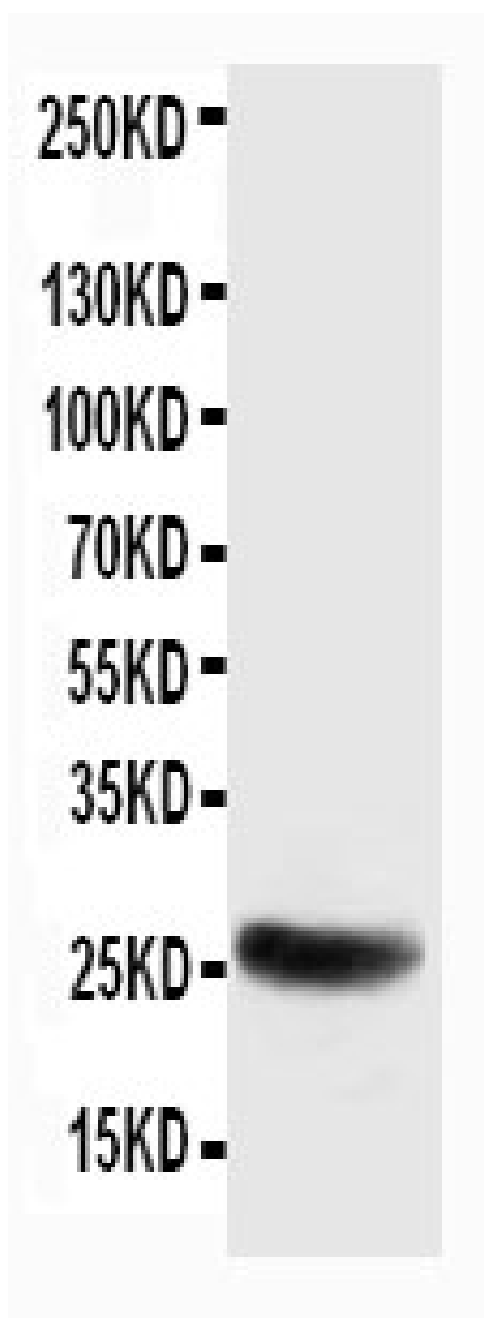
12 months from date of receipt, -20°C as supplied.

Background Information

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 Ca²⁺-independent fashion. In glutamatergic synapses SNAP-25 decreases the Ca²⁺ responsiveness, while it is naturally absent in GABAergic synapses.

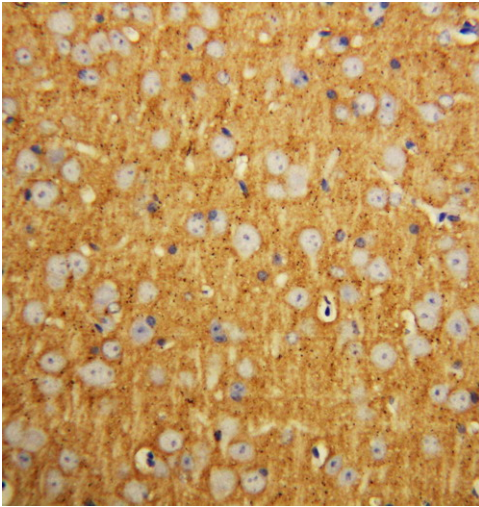
Selected Validation Data



Western blot analysis of SNAP25 using anti-SNAP25 antibody (BA1400). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat brain tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-SNAP25 antigen affinity purified polyclonal antibody (BA1400) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for SNAP25 at approximately 25 kDa. The expected band size for SNAP25 is at 23 kDa.



IHC analysis of SNAP25 using anti-SNAP25 antibody (BA1400). SNAP25 was detected in a paraffin-embedded section of rat brain tissue. The tissue section was incubated with rabbit anti-SNAP25 Antibody (BA1400) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.