



**Polyclonal Anti- Synaptosome-associated protein of 25,000 daltons, SNAP25 (Sepharose Bead Conjugate)**

**Catalogue No.** PA1315-S

**Lot No.** 03101

**Ig type:** rabbit IgG

**Size:** 100µg/vial

**Specificity**

Rat, mouse. No cross reactivity with other proteins.

**Recommended application**

(Immunoprecipitation(IP))

**Immunogen**

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

**Purification**

Immunogen affinity purified.

**Formulation**

50% slurry in PBS pH 7.2 with 0.01mg NaN<sub>3</sub> preservative.

**Storage**

Store at 4°C for frequent use.

**Description:**

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays

**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.<sup>1</sup> 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.<sup>2</sup> SNAP-25 inhibits P/Q- and L-type voltage-gated calcium channels located presynaptically<sup>3</sup> and interacts with the synaptotagmin C2B domain in Ca<sup>2+</sup>-independent fashion<sup>4</sup>. In glutamatergic synapses SNAP-25 decreases the Ca<sup>2+</sup> responsiveness, while it is naturally absent in GABAergic synapses<sup>5</sup>.

**REFERENCE**

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3. Hodel A (1998). "SNAP-25". *The International Journal of Biochemistry & Cell Biology* 30 (10): 1069–1073.
4. Chapman ER (2002). "Synaptotagmin: A Ca<sup>2+</sup> sensor that triggers exocytosis?". *Nature Reviews Molecular Cell Biology* 3: 498–508.
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