

## Goat Anti-SNAP25 Antibody

Peptide-affinity purified goat antibody Catalog # AF2012a

## Specification

## **Goat Anti-SNAP25 Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, IHC, E <u>P60880</u> <u>NP\_570824</u>, <u>6616</u> Human, Mouse Rat, Dog Goat Polyclonal 100ug/200ul IgG 23315

## Goat 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

**Dilution** WB~~1:1000 IHC~~1:100~500 E~~N/A

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-SNAP25 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **Goat 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

### Goat Anti-SNAP25 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- <u>Dot Blot</u>
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### Goat Anti-SNAP25 Antibody - Images



AF2012a (0.03  $\mu$ g/ml) staining of Mouse Brain lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





AF2012a (2.5  $\mu$ g/ml) staining of paraffin embedded Human Cerebral Cortex. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



EB06738 (0.005µg/ml) staining of Human Brain (Cerebellum) (A), Mouse Brain (B) and Rat Brain (C) lysates (35µg protein in RIPA buffer). Detected by chemiluminescence.

# Goat Anti-SNAP25 Antibody - Background

Synaptic vesicle membrane docking and fusion is mediated by SNAREs (soluble N-ethylmaleimide-sensitive factor attachment protein receptors) located on the vesicle membrane (v-SNAREs) and the target membrane (t-SNAREs). The assembled v-SNARE/t-SNARE complex consists of a bundle of four helices, one of which is supplied by v-SNARE and the other three by t-SNARE. For t-SNAREs on the plasma membrane, the protein syntaxin supplies one helix and the protein encoded by this gene contributes the other two. Therefore, this gene product is a presynaptic plasma membrane protein involved in the regulation of neurotransmitter release. Two alternative transcript variants encoding different protein isoforms have been described for this gene.

# Goat Anti-SNAP25 Antibody - References

Association Among SNAP-25 Gene Ddel and Mnll Polymorphisms and Hemodynamic Changes During Methylphenidate Use: A Functional Near-Infrared Spectroscopy Study. Oner O, et al. J Atten Disord, 2010 Aug 2. PMID 20679152.

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An association study between SNAP-25 gene and Attention-Deficit Hyperactivity Disorder. Zhang H, et al. Eur J Paediatr Neurol, 2010 Jul 2. PMID 20599404.



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Association between a synaptosomal protein (SNAP-25) gene polymorphism and verbal memory and attention in patients with endogenous psychoses and mentally healthy subjects. Golimbet VE, et al. Neurosci Behav Physiol, 2010 May. PMID 20333500.