

**SNCA Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AW5309**

**Specification**

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**SNCA Antibody (C-term) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">P37840</a>
Reactivity	Human, Rat
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	H=14,13;M=14;Rat=15 KDa
Isotype	Rabbit IgG
Antigen Source	HUMAN

**SNCA Antibody (C-term) - Additional Information**

**Gene ID** 6622

**Antigen Region**  
92-125

**Other Names**

Alpha-synuclein, Non-A beta component of AD amyloid, Non-A4 component of amyloid precursor, NACP, SNCA, NACP, PARK1

**Dilution**

WB~~1:1000  
IHC-P~~1:25  
FC~~1:25

**Target/Specificity**

This SNCA antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 92-125 amino acids from the C-terminal region of human SNCA.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

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

**Precautions**

SNCA Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**SNCA Antibody (C-term) - Protein Information**

## Name SNCA

## Synonyms NACP, PARK1

## Function

Neuronal protein that plays several roles in synaptic activity such as regulation of synaptic vesicle trafficking and subsequent neurotransmitter release (PubMed:<a href="http://www.uniprot.org/citations/20798282" target="\_blank">20798282</a>, PubMed:<a href="http://www.uniprot.org/citations/26442590" target="\_blank">26442590</a>, PubMed:<a href="http://www.uniprot.org/citations/28288128" target="\_blank">28288128</a>, PubMed:<a href="http://www.uniprot.org/citations/30404828" target="\_blank">30404828</a>). Participates as a monomer in synaptic vesicle exocytosis by enhancing vesicle priming, fusion and dilation of exocytotic fusion pores (PubMed:<a href="http://www.uniprot.org/citations/28288128" target="\_blank">28288128</a>, PubMed:<a href="http://www.uniprot.org/citations/30404828" target="\_blank">30404828</a>). Mechanistically, acts by increasing local Ca(2+) release from microdomains which is essential for the enhancement of ATP-induced exocytosis (PubMed:<a href="http://www.uniprot.org/citations/30404828" target="\_blank">30404828</a>). Acts also as a molecular chaperone in its multimeric membrane-bound state, assisting in the folding of synaptic fusion components called SNAREs (Soluble NSF Attachment Protein REceptors) at presynaptic plasma membrane in conjunction with cysteine string protein-alpha/DNAJC5 (PubMed:<a href="http://www.uniprot.org/citations/20798282" target="\_blank">20798282</a>). This chaperone activity is important to sustain normal SNARE-complex assembly during aging (PubMed:<a href="http://www.uniprot.org/citations/20798282" target="\_blank">20798282</a>). Also plays a role in the regulation of the dopamine neurotransmission by associating with the dopamine transporter (DAT1) and thereby modulating its activity (PubMed:<a href="http://www.uniprot.org/citations/26442590" target="\_blank">26442590</a>).

## Cellular Location

Cytoplasm. Membrane. Nucleus. Synapse Secreted. Cell projection, axon {ECO:0000250|UniProtKB:O55042}. Note=Membrane-bound in dopaminergic neurons (PubMed:15282274). Expressed and colocalized with SEPTIN4 in dopaminergic axon terminals, especially at the varicosities (By similarity). {ECO:0000250|UniProtKB:O55042, ECO:0000269|PubMed:15282274}

## Tissue Location

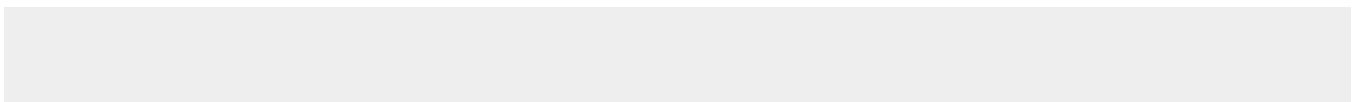
Highly expressed in presynaptic terminals in the central nervous system. Expressed principally in brain

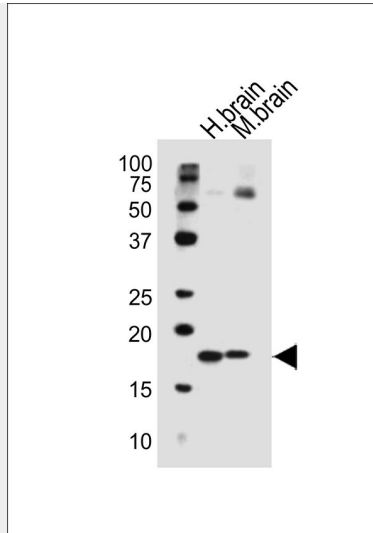
## SNCA Antibody (C-term) - Protocols

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

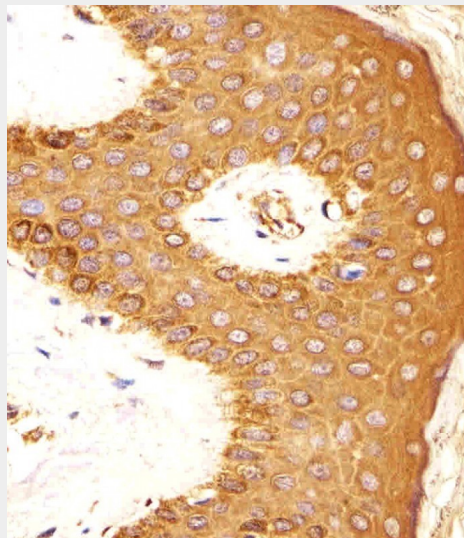
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## SNCA Antibody (C-term) - Images

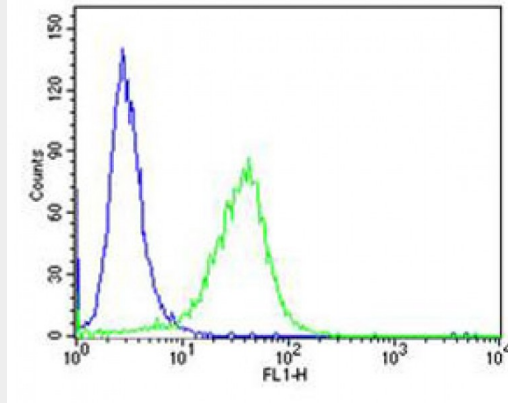




Western blot analysis of lysates from human brain, mouse brain tissue lysate (from left to right), using SNCA Antibody (C-term)(Cat. #AW5309). AW5309 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.



AW5309 staining SNCA in Human skin tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



Flow cytometric analysis of HeLa cells using SNCA Antibody (C-term)(green, Cat#AW5309) compared to an isotype control of rabbit IgG(blue). AW5309 was diluted at 1:25 dilution. An Alexa Fluor® 488 goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody.

### **SNCA Antibody (C-term) - Background**

May be involved in the regulation of dopamine release and transport. Induces fibrillization of microtubule-associated protein tau. Reduces neuronal responsiveness to various apoptotic stimuli, leading to a decreased caspase-3 activation.

### **SNCA Antibody (C-term) - References**

- Ueda K.,et al.Proc. Natl. Acad. Sci. U.S.A. 90:11282-11286(1993).
- Campion D.,et al.Genomics 26:254-257(1995).
- Ueda K.,et al.Biochem. Biophys. Res. Commun. 205:1366-1372(1994).
- Xia Y.,et al.Submitted (JAN-1996) to the EMBL/GenBank/DDBJ databases.
- Touchman J.W.,et al.Genome Res. 11:78-86(2001).