

SNCA Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8649b**Specification**

SNCA Antibody - Product Information

Application	WB,E
Primary Accession	P37840
Other Accession	P61140 , P61144 , P61145
Reactivity	Human, Mouse
Host	Mouse
Clonality	monoclonal
Isotype	IgG1, κ
Calculated MW	14460

SNCA Antibody - Additional Information**Gene ID** 6622**Other Names**

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

Target/Specificity

This antibody is generated from a mouse immunized a recombinant protein from human.

Dilution

WB~~1:2000

E~~Use at an assay dependent concentration.

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

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 is for research use only and not for use in diagnostic or therapeutic procedures.

SNCA Antibody - 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:[20798282](#), PubMed:[26442590](#), PubMed:[28288128](#), PubMed:[30404828](#)). Participates as a monomer in synaptic vesicle exocytosis by enhancing vesicle priming, fusion and dilation of exocytotic fusion pores (PubMed:[28288128](#), PubMed:[30404828](#)). Mechanistically, acts by increasing local Ca(2+) release from microdomains which is essential for the enhancement of ATP-induced exocytosis (PubMed:[30404828](#)). Also acts 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:[20798282](#)). This chaperone activity is important to sustain normal SNARE-complex assembly during aging (PubMed:[20798282](#)). Also plays a role in the regulation of the dopamine neurotransmission by associating with the dopamine transporter (DAT1) and thereby modulating its activity (PubMed:[26442590](#)).

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

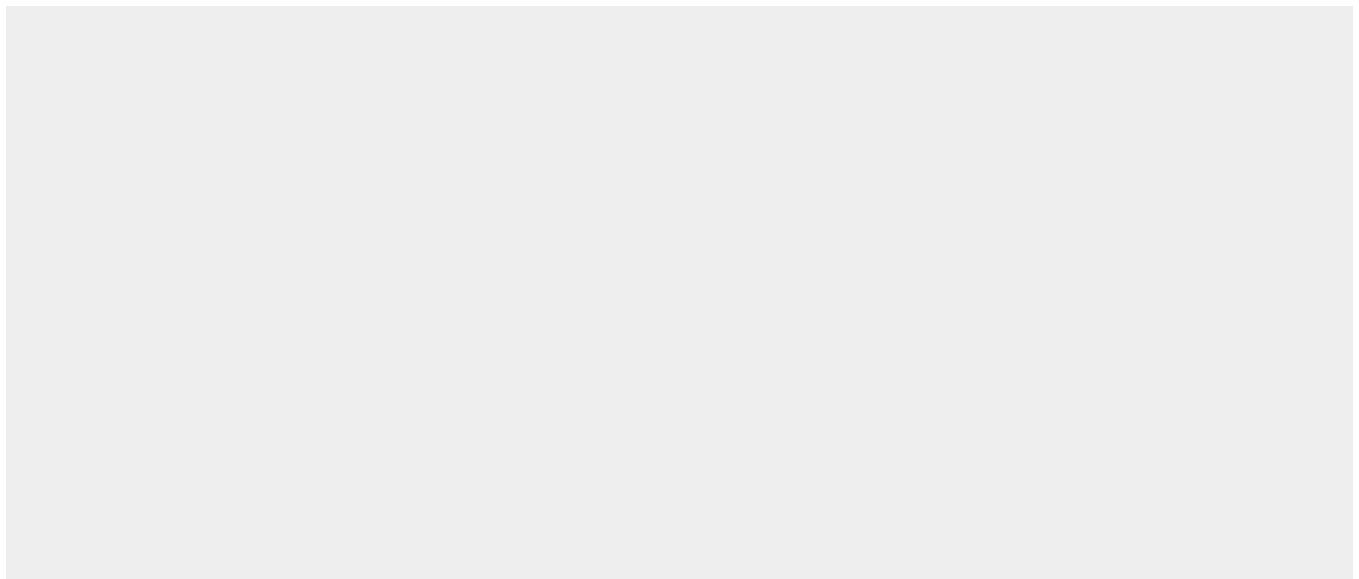
Highly expressed in presynaptic terminals in the central nervous system. Expressed principally in brain

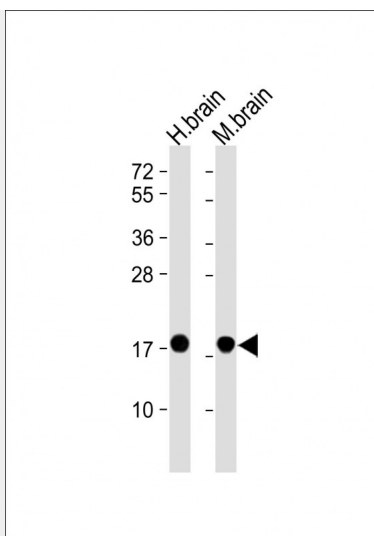
SNCA Antibody - Protocols

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 - Images





All lanes : Anti-SNCA at 1:2000 dilution Lane 1: Human brain lysate Lane 2: Mouse brain lysate
Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated
at 1/10000 dilution. Predicted band size : 14 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

SNCA Antibody - 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 - 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).