

SNCA Blocking Peptide (C-term)
Synthetic peptide
Catalog # BP21137a**Specification**

SNCA Blocking Peptide (C-term) - Product InformationPrimary Accession [P37840](#)**SNCA Blocking Peptide (C-term) - 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

The synthetic peptide sequence is selected from aa 92-105 of HUMAN SNCA

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SNCA Blocking Peptide (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:28288128, PubMed:30404828, PubMed:20798282, PubMed:26442590). 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). 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: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 Blocking Peptide (C-term) - Protocols

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

- [Blocking Peptides](#)

SNCA Blocking Peptide (C-term) - Images

SNCA Blocking Peptide (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 Blocking Peptide (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).
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Touchman J.W.,et al.Genome Res. 11:78-86(2001).