

Alpha Synuclein Antibody
Rabbit mAb
Catalog # AP90187

Specification

Alpha Synuclein Antibody - Product Information

Application **WB, IHC, FC, ICC, IP**
Primary Accession [P37840](#)
Clonality **Monoclonal**

Other Names

Alpha-synuclein; NACP; non A-beta component of AD amyloid; Non-A beta component of AD amyloid; PARK1; PARK4; PD1; SNCA;

Isotype **Rabbit IgG**
Host **Rabbit**
Calculated MW **14460 Da**

Alpha Synuclein Antibody - Additional Information

Purification **Affinity-chromatography**
Immunogen **A synthesized peptide derived from human Alpha Synuclein**

Description **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. Genetic alterations of SNCA resulting in aberrant polymerization into fibrils, are associated with several neurodegenerative diseases (synucleinopathies).**

Storage Condition and Buffer **Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

Alpha Synuclein 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:<a

[26442590](http://www.uniprot.org/citations/26442590), PubMed: [28288128](http://www.uniprot.org/citations/28288128), PubMed: [30404828](http://www.uniprot.org/citations/30404828)). Participates as a monomer in synaptic vesicle exocytosis by enhancing vesicle priming, fusion and dilation of exocytotic fusion pores (PubMed: [28288128](http://www.uniprot.org/citations/28288128), PubMed: [30404828](http://www.uniprot.org/citations/30404828)). Mechanistically, acts by increasing local Ca(2+) release from microdomains which is essential for the enhancement of ATP-induced exocytosis (PubMed: [30404828](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/20798282)). This chaperone activity is important to sustain normal SNARE-complex assembly during aging (PubMed: [20798282](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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

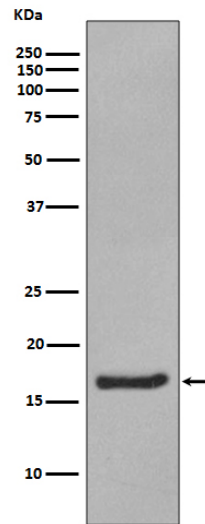
Alpha Synuclein Antibody - Protocols

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](#)

Alpha Synuclein Antibody - Images





Western blot analysis of Alpha Synuclein expression in Human fetal brain lysate.