

# alpha Synuclein Rabbit mAb

Catalog # AP75067

## Product Information

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<b>Application</b>	WB, IHC-P, IP
<b>Primary Accession</b>	<a href="#">P37840</a>
<b>Reactivity</b>	Rat, Human, Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	Monoclonal Antibody
<b>Isotype</b>	IgG
<b>Conjugate</b>	Unconjugated
<b>Purification</b>	Affinity Purified
<b>Calculated MW</b>	14460

## Additional Information

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<b>Gene ID</b>	6622
<b>Other Names</b>	SNCA
<b>Dilution</b>	WB~~1:500-1:1000 IHC-P~~N/A IP~~1:20-1:50
<b>Format</b>	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

## Protein Information

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<b>Name</b>	SNCA
<b>Synonyms</b>	NACP, PARK1
<b>Function</b>	Neuronal protein that plays several roles in synaptic activity such as regulation of synaptic vesicle trafficking and subsequent neurotransmitter release (PubMed: <a href="#">20798282</a> , PubMed: <a href="#">26442590</a> , PubMed: <a href="#">28288128</a> , PubMed: <a href="#">30404828</a> ). Participates as a monomer in synaptic vesicle exocytosis by enhancing vesicle priming, fusion and dilation of exocytotic fusion pores (PubMed: <a href="#">28288128</a> , PubMed: <a href="#">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="#">30404828</a> ). 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: <a href="#">20798282</a> ). 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}

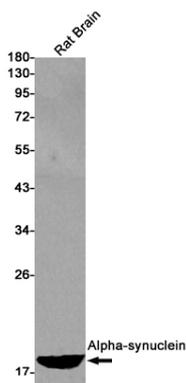
### Tissue Location

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

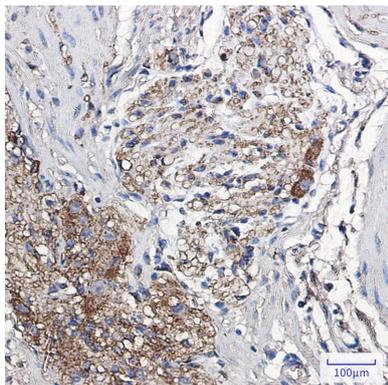
## Background

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

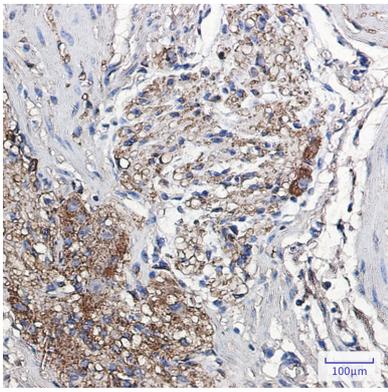
## Images



Western blot analysis of Alphasynuclein in rat Brain lysates using alpha Synuclein antibody.



Immunohistochemistry analysis of paraffin-embedded Human colon cancer using Alphasynuclein antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.



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