

alpha Synuclein Rabbit mAb

Catalog # AP77416

Product Information

Application	WB, IHC-P, IF, FC, ICC, IP
Primary Accession	P37840
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Immunogen	A synthesized peptide derived from human Alpha Synuclein
Purification	Affinity Chromatography
Calculated MW	14460

Additional Information

Gene ID	6622
Other Names	SNCA
Dilution	WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 FC~~1:10~50 ICC~~N/A IP~~N/A
Format	Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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- α /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](#)).

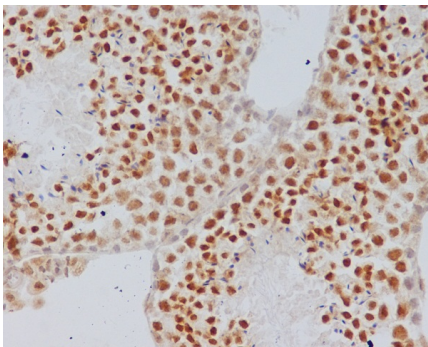
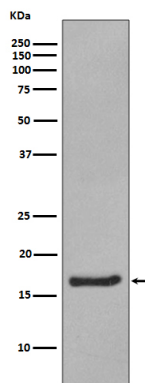
Cellular Location

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

Images



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