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Phospho Alpha-synuclein (Tyr125) Antibody

Catalog # ABV11950

Product Information

Application	WB, IHC
Primary Accession	P37840
Reactivity	Human, Mouse, Rat
Host	Rabbit
Isotype	Rabbit IgG
Calculated MW	14460

Additional Information

Gene ID	6622
Positive Control	WB; HeLa, mouse brain, rat brain lysate, IHC; human brain tissue
Application & Usage	WB; 1:500 – 1:2000, IHC; 1:50 – 1:200
Other Names	NACP; PARK1; Alpha-synuclein; Non-A beta component of AD amyloid; Non-A4 component of amyloid precursor; NACP
Target/Specificity	SNCA
Antibody Form	Liquid
Appearance	Colorless liquid
Handling	The antibody solution should be gently mixed before use
Reconstitution & Storage	-20°C
Background Descriptions	
Precautions	Phospho Alpha-synuclein (Tyr125) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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).

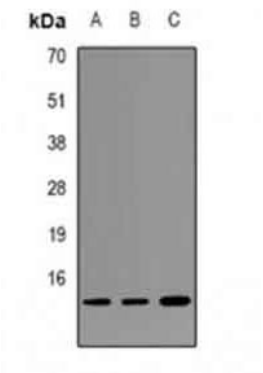
Cellular Location

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}

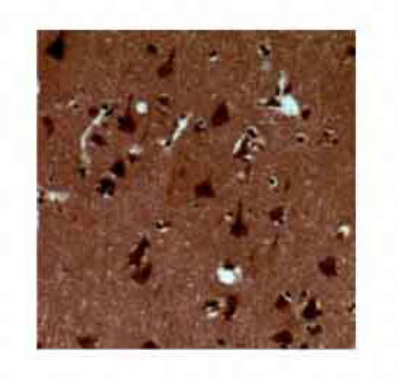
Tissue Location

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

Images



WB analysis of Alphasynuclein (pY125) expression in HeLa (A); mouse brain (B); rat brain (C) whole cell lysates



Immunohistochemical analysis of Alpha-synuclein (pY125) staining in human brain formalin fixed paraffin embedded tissue section.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.