

Anti-Alpha-synuclein (pY136) Antibody

Rabbit polyclonal antibody to Alpha-synuclein (pY136) Catalog # AP61177

Product Information

ApplicationWBPrimary AccessionP37840Other AccessionO55042

Reactivity Human, Mouse, Rat, Monkey, Pig

Host Rabbit
Clonality Polyclonal
Calculated MW 14460

Additional Information

Gene ID 6622

Other Names NACP; PARK1; Alpha-synuclein; Non-A beta component of AD amyloid; Non-A4

component of amyloid precursor; NACP

Target/Specificity KLH-conjugated synthetic peptide encompassing a sequence within the

C-term region of human Alpha-synuclein (pY136). The exact sequence is

proprietary.

Dilution WB~~WB (1/500 - 1/1000)

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

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:<u>20798282</u>, PubMed:<u>26442590</u>, PubMed:<u>28288128</u>,

PubMed:<u>30404828</u>). Participates as a monomer in synaptic vesicle exocytosis by enhancing vesicle priming, fusion and dilation of exocytotic fusion pores (PubMed:<u>28288128</u>, PubMed:<u>30404828</u>). 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}

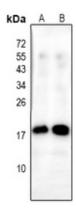
Tissue Location

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

Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Alpha-synuclein (pY136). The exact sequence is proprietary.

Images



Western blot analysis of Alpha-synuclein (pY136) expression in mouse brain (A), rat brain (B) whole cell lysates.

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