

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

### Specification

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#### Anti-Alpha-synuclein (pY136) Antibody - Product Information

Application	WB
Primary Accession	<a href="#">P37840</a>
Other Accession	<a href="#">O55042</a>
Reactivity	Human, Mouse, Rat, Monkey, Pig
Host	Rabbit
Clonality	Polyclonal
Calculated MW	14460

#### Anti-Alpha-synuclein (pY136) Antibody - 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

Recognizes endogenous levels of Alpha-synuclein (pY136) protein.

#### 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

#### Anti-Alpha-synuclein (pY136) 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](http://www.uniprot.org/citations/20798282), PubMed: [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:<a href="http://www.uniprot.org/citations/28288128" target="\_blank">28288128</a>, PubMed:<a href="http://www.uniprot.org/citations/30404828" target="\_blank">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="http://www.uniprot.org/citations/30404828" target="\_blank">30404828</a>). 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:<a href="http://www.uniprot.org/citations/20798282" target="\_blank">20798282</a>). This chaperone activity is important to sustain normal SNARE-complex assembly during aging (PubMed:<a href="http://www.uniprot.org/citations/20798282" target="\_blank">20798282</a>). Also plays a role in the regulation of the dopamine neurotransmission by associating with the dopamine transporter (DAT1) and thereby modulating its activity (PubMed:<a href="http://www.uniprot.org/citations/26442590" target="\_blank">26442590</a>).

#### 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

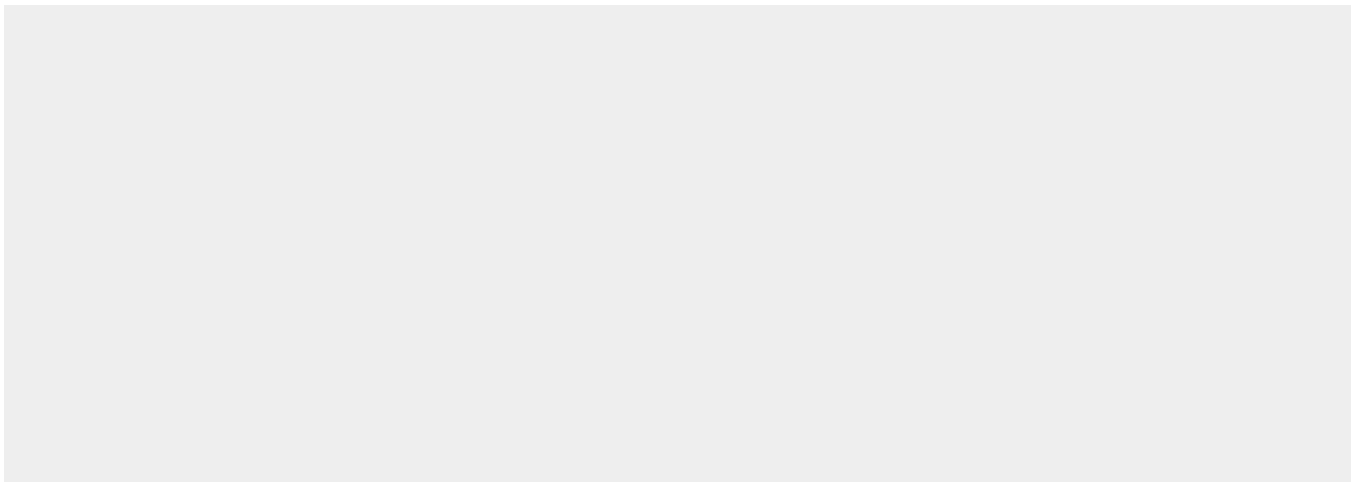
Highly expressed in presynaptic terminals in the central nervous system. Expressed principally in brain

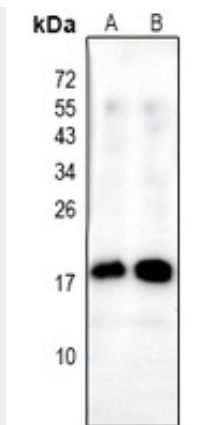
### Anti-Alpha-synuclein (pY136) Antibody - Protocols

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](#)

### Anti-Alpha-synuclein (pY136) Antibody - Images





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

### **Anti-Alpha-synuclein (pY136) Antibody - Background**

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