

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

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

### **Specification**

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

Application WB
Primary Accession P37840
Other Accession O55042

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**

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

### 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:<a

href="http://www.uniprot.org/citations/20798282" target="\_blank">20798282</a>, PubMed:<a href="http://www.uniprot.org/citations/26442590" target="\_blank">26442590</a>, 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>). 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>). 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="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

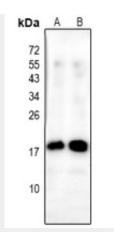
### Anti-Alpha-synuclein (pY136) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- 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.