

# Anti-Phospho-alpha Synuclein (Y125) Rabbit Monoclonal Antibody

Catalog # ABO16794

# Specification

# Anti-Phospho-alpha Synuclein (Y125) Rabbit Monoclonal Antibody - Product Information

Application	WB
Primary Accession	<u>P37840</u>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	
Anti-Phospho-alpha Synuclein (Y125) Ra	abbit Monoclonal Antibody

Anti-Phospho-alpha Synuclein (Y125) Rabbit Monoclonal Antibody . Tested in WB applications. This antibody reacts with Human.

# Anti-Phospho-alpha Synuclein (Y125) Rabbit Monoclonal Antibody - Additional Information

Gene ID 6622

**Other Names** Alpha-synuclein, Non-A beta component of AD amyloid, Non-A4 component of amyloid precursor, NACP, SNCA, NACP, PARK1

Application Details WB 1:500-1:2000

**Contents** Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human Phospho-alpha Synuclein (Y125)

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

# Anti-Phospho-alpha Synuclein (Y125) Rabbit Monoclonal 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>). 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:055042}. 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:055042, ECO:0000269|PubMed:15282274}

#### **Tissue Location**

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

# Anti-Phospho-alpha Synuclein (Y125) Rabbit Monoclonal Antibody - Protocols

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

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

Anti-Phospho-alpha Synuclein (Y125) Rabbit Monoclonal Antibody - Images