

### Anti-Phospho-alpha Synuclein (S129) SNCA Rabbit Monoclonal Antibody Catalog # ABO13206

## Specification

## Anti-Phospho-alpha Synuclein (S129) SNCA Rabbit Monoclonal Antibody - Product Information

Application **Primary Accession** Host Isotype Reactivity Clonality Format Description

WB, IF, ICC P37840 Rabbit Rabbit IgG Rat, Human, Mouse Monoclonal Liauid

Anti-Phospho-alpha Synuclein (S129) SNCA Rabbit Monoclonal Antibody . Tested in WB, ICC/IF applications. This antibody reacts with Human, Mouse, Rat.

## Anti-Phospho-alpha Synuclein (S129) SNCA 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

**Calculated MW** 14460 MW KDa

**Application Details** WB 1:500-1:2000<br>ICC/IF 1:50-1:200

**Subcellular Localization** 

Cytoplasm, cytosol. Membrane. Nucleus. Cell junction, synapse. Secreted. Membrane-bound in dopaminergic neurons..

**Tissue Specificity** 

Expressed principally in brain but is also expressed in low concentrations in all tissues examined except in liver. Concentrated in presynaptic nerve terminals.

Contents

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

Immunogen A synthesized peptide derived from human Phospho-alpha Synuclein (S129)

**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 (S129) SNCA 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>). 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-Phospho-alpha Synuclein (S129) SNCA Rabbit Monoclonal Antibody - Protocols

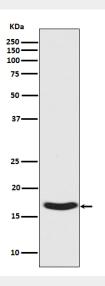
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry



- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Phospho-alpha Synuclein (S129) SNCA Rabbit Monoclonal Antibody - Images



Western blot analysis of Synuclein phosphorylation expression in Human fetal brain lysate.