

**Phospho-alpha Synuclein (Ser129) Rabbit mAb**  
Catalog # AP76923**Specification****Phospho-alpha Synuclein (Ser129) Rabbit mAb - Product Information**

Application	WB, ICC
Primary Accession	<a href="#">P37840</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	14460

**Phospho-alpha Synuclein (Ser129) Rabbit mAb - Additional Information**

Gene ID 6622

**Other Names**

SNCA

**Format**

Liquid

**Phospho-alpha Synuclein (Ser129) Rabbit mAb - 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: [28288128](http://www.uniprot.org/citations/28288128), PubMed: [30404828](http://www.uniprot.org/citations/30404828)). Mechanistically, acts by increasing local Ca(2+) release from microdomains which is essential for the enhancement of ATP-induced exocytosis (PubMed: [30404828](http://www.uniprot.org/citations/30404828)). 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: [20798282](http://www.uniprot.org/citations/20798282)). This chaperone activity is important to sustain normal SNARE-complex assembly during aging (PubMed: [20798282](http://www.uniprot.org/citations/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:<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

**Phospho-alpha Synuclein (Ser129) Rabbit mAb - 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](#)

**Phospho-alpha Synuclein (Ser129) Rabbit mAb - Images**