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Phospho-alpha Synuclein (S129) Antibody
Rabbit mAb
Catalog # AP90244

Specification

Phospho-alpha Synuclein (S129) Antibody - Product Information

Application	**WB, IHC, ICC**
Primary Accession	P37840
Clonality	**Monoclonal**

Other Names
Alpha-synuclein; NACP; non A-beta component of AD amyloid; PARK1; PARK4; PD1; SNCA;

Isotype	**Rabbit IgG**
Host	**Rabbit**
Calculated MW	**14460 Da**

Phospho-alpha Synuclein (S129) Antibody - Additional Information

Dilution	**WB~~1:1000** **IHC~~1:100~500** **ICC~~N/A**
Purification	**Affinity-chromatography**
Immunogen	**A synthesized peptide derived from human Phospho-alpha Synuclein (S129)**
Description	**SNCA a member of the synuclein family. Abundantly expressed in the brain. Inhibits phospholipase D2 selectively. May integrate presynaptic signaling and membrane trafficking. Implicated in the pathogenesis of Parkinson's disease. A major component of amyloid plaques in the brains of patients with Alzheimer's disease. Two alternatively spliced isoforms transcripts have been identified.**
Storage Condition and Buffer	**Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

Phospho-alpha Synuclein (S129) 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, PubMed:26442590, PubMed:28288128, PubMed:30404828). Participates as a monomer in synaptic vesicle exocytosis by enhancing vesicle priming, fusion and dilation of exocytotic fusion pores (PubMed:28288128, PubMed:30404828). Mechanistically, acts by increasing local Ca(2+) release from microdomains which is essential for the enhancement of ATP-induced exocytosis (PubMed:30404828). 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:20798282). This chaperone activity is important to sustain normal SNARE-complex assembly during aging (PubMed: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:26442590).

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 (S129) 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 Cytomety
- Cell Culture

Phospho-alpha Synuclein (S129) Antibody - Images

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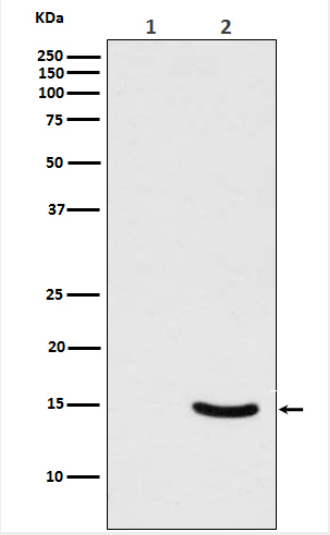

Western blot analysis of Phospho-alpha Synuclein (Ser129) expression in (1) 293T cell lysate; (2) 293T cell lysate transfected with Polo-Like Kinase 2 and alpha Synuclein.