

Product datasheet

# Anti-Alpha-synuclein (phospho S129) antibody [P-syn/81A] ab184674

★★★★☆ 2 Abreviews 10 References 1 Image

Overview

<b>Product name</b>	Anti-Alpha-synuclein (phospho S129) antibody [P-syn/81A]
<b>Description</b>	Mouse monoclonal [P-syn/81A] to Alpha-synuclein (phospho S129)
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, IHC-FoFr
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human <b>Predicted to work with:</b> Rat, Cow, Pig, Chimpanzee, Cynomolgus monkey, Rhesus monkey, Gorilla, Orangutan 
<b>Immunogen</b>	Synthetic peptide corresponding to Human Alpha-synuclein aa 124-134 (phospho S129) conjugated to keyhole limpet haemocyanin (Cysteine residue). Sequence: AYEMPSEEGYQ  Database link: <a href="#">P37840</a>   <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a>
<b>Positive control</b>	IHC-P: Diseased human brain tissue.

Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.1% Sodium azide Constituent: 100% PBS
<b>Purity</b>	Affinity purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	P-syn/81A
<b>Isotype</b>	IgG2a

Applications

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab184674** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/500 - 1/1000. Retrieve antigens with 70% Formic acid for 10-30 minutes at room temperature before commencing with IHC staining protocol.
IHC-FoFr		Use at an assay dependent concentration. PubMed: 29751824

## Target

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### Function

May be involved in the regulation of dopamine release and transport. Induces fibrillization of microtubule-associated protein tau. Reduces neuronal responsiveness to various apoptotic stimuli, leading to a decreased caspase-3 activation.

### 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.

### Involvement in disease

Genetic alterations of SNCA resulting in aberrant polymerization into fibrils, are associated with several neurodegenerative diseases (synucleinopathies). SNCA fibrillar aggregates represent the major non A-beta component of Alzheimer disease amyloid plaque, and a major component of Lewy body inclusions. They are also found within Lewy body (LB)-like intraneuronal inclusions, glial inclusions and axonal spheroids in neurodegeneration with brain iron accumulation type 1. Parkinson disease 1  
Parkinson disease 4  
Dementia Lewy body

### Sequence similarities

Belongs to the synuclein family.

### Domain

The 'non A-beta component of Alzheimer disease amyloid plaque' domain (NAC domain) is involved in fibrils formation. The middle hydrophobic region forms the core of the filaments. The C-terminus may regulate aggregation and determine the diameter of the filaments.

### Post-translational modifications

Phosphorylated, predominantly on serine residues. Phosphorylation by CK1 appears to occur on residues distinct from the residue phosphorylated by other kinases. Phosphorylation of Ser-129 is selective and extensive in synucleinopathy lesions. In vitro, phosphorylation at Ser-129 promoted insoluble fibril formation. Phosphorylated on Tyr-125 by a PTK2B-dependent pathway upon osmotic stress.

Hallmark lesions of neurodegenerative synucleinopathies contain alpha-synuclein that is modified by nitration of tyrosine residues and possibly by dityrosine cross-linking to generated stable oligomers.

Ubiquitinated. The predominant conjugate is the diubiquitinated form.

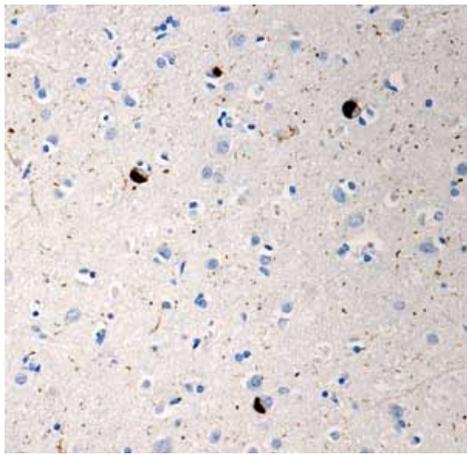
Acetylation at Met-1 seems to be important for proper folding and native oligomeric structure.

### Cellular localization

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

## Images

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Immunohistochemical analysis of formalin-fixed, paraffin-embedded diseased human brain tissue labeling alpha Synuclein (phospho S129) with ab184674 at 1/500 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Alpha-synuclein (phospho S129) antibody [P-syn/81A] (ab184674)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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