**Product datasheet**

**Anti-Alpha-synuclein antibody ab6162**

[5 Abreviews] [28 References] [1 Image]

### Overview

**Product name**  
Anti-Alpha-synuclein antibody

**Description**  
Sheep polyclonal to Alpha-synuclein

**Host species**  
Sheep

**Specificity**  
Human and rat alpha synuclein. Cross reactivity: This antibody is known to react with human, mouse, rat and other rodents. Cross reactivity with other species has not yet been tested.

**Tested applications**  
**Suitable for:** WB  
**Unsuitable for:** Flow Cyt or ICC/IF

**Species reactivity**  
Reacts with: Mouse, Human

**Immunogen**  

Sequence:

C-MPVDPDNEAYEMPSEE

**General notes**

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

### Properties

**Form**  
Liquid

**Storage instructions**  
Shipped at 4°C. Store at +4°C short term (1-2 weeks). Add glycerol to a final volume of 50% for extra stability and aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

**Storage buffer**  
pH: 7.00

**Purity**  
Immunogen affinity purified

**Clonality**  
Polyclonal

**Isotype**  
IgG
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 nitrification 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

Application notes
Is unsuitable for Flow Cyt or ICC/IF.

Application
<table>
<thead>
<tr>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td>Use a concentration of 0.5 µg/ml.</td>
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</tbody>
</table>

Images
**Western blot - Anti-Alpha-synuclein antibody (ab6162)**

**All lanes**: Anti-Alpha-synuclein antibody (ab6162) at 1 µg/ml

**Lane 1**: Recombinant Human α-synuclein at 0.1 µg

**Lane 2**: Mouse brain lysate at 30 µg

**Secondary**

**All lanes**: anti-sheep HRP at 1/6000 dilution

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

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