Anti-Alpha-synuclein antibody ab155038

Overview

Product name: Anti-Alpha-synuclein antibody
Description: Rabbit polyclonal to Alpha-synuclein
Host species: Rabbit
Specificity: Due to high sequence homology ab155038 might react with Beta synuclein
Tested applications: Suitable for: WB, IHC-P, ICC/IF
Species reactivity: Reacts with: Mouse, Human
Immunogen: Recombinant fragment corresponding to Human alpha Synuclein aa 1-140.
Positive control: Mouse brain whole cell lysate; A431 cells; Human colon carcinoma tissue.

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer: pH: 7.00
Preservative: 0.025% Proclin
 Constituents: PBS, 1% BSA, 20% Glycerol
Purity: Immunogen affinity purified
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab155038 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHC-P</td>
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<td>1/100 - 1/1000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol using 10mM Citrate buffer (pH6.0) or Tris-EDTA buffer (pH8.0).</td>
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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**

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<th>Notes</th>
</tr>
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**Western blot - Anti-Alpha-synuclein antibody (ab155038)**

Anti-Alpha-synuclein antibody (ab155038) at 1/1000 dilution + Mouse brain whole cell lysate at 50 µg

**Predicted band size:** 14 kDa

15% SDS PAGE

**Immunofluorescent analysis of methanol-fixed A431 cells labeling alpha Synuclein with ab155038 at 1/500 dilution. Right image co-stained with Hoechst 33343.**

**Immunohistochemical analysis of paraffin-embedded Human colon carcinoma tissue labeling alpha Synuclein with ab155038 at 1/250 dilution.**
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