

Product datasheet

Anti-Alpha-synuclein (phospho Y125) antibody [EPR2179(2)] ab124955

Recombinant RabMAb

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Overview

Product name	Anti-Alpha-synuclein (phospho Y125) antibody [EPR2179(2)]
Description	Rabbit monoclonal [EPR2179(2)] to Alpha-synuclein (phospho Y125)
Host species	Rabbit
Specificity	This antibody only detects alpha Synuclein when phosphorylated at tyrosine 125.
Tested applications	Suitable for: WB Unsuitable for: Flow Cyt, IHC-P or IP
Species reactivity	Reacts with: Human Does not react with: Mouse, Rat
Immunogen	Synthetic peptide within Human Alpha-synuclein (phospho Y125). The exact sequence is proprietary.
Positive control	HeLa cell lysates treated with pervanadate.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents .

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant

Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR2179(2)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab124955 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
WB		1/1000 - 1/10000. Detects a band of approximately 18 kDa (predicted molecular weight: 14 kDa).

Application notes Is unsuitable for Flow Cyt, IHC-P or IP.

Target

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.

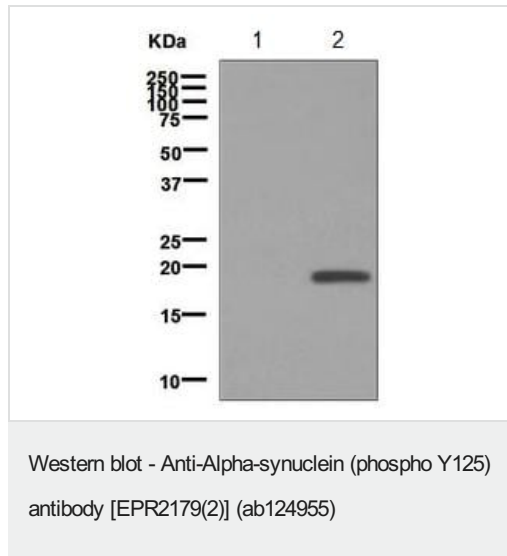
Hallmark lesions of neurodegenerative synucleinopathies contain alpha-synuclein that is modified by nitration of tyrosine residues and possibly by dityrosine cross-linking to generated stable oligomers.

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

Images



All lanes : Anti-Alpha-synuclein (phospho Y125) antibody [EPR2179(2)] (ab124955) at 1/1000 dilution

Lane 1 : HeLa cell lysates, untreated

Lane 2 : HeLa cell lysates, treated with pervanadate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat anti-Rabbit HRP at 1/2000 dilution

Predicted band size: 14 kDa

Why choose a recombinant antibody?

- Research with confidence**
Consistent and reproducible results
- Long-term and scalable supply**
Recombinant technology
- Success from the first experiment**
Confirmed specificity
- Ethical standards compliant**
Animal-free production

Anti-Alpha-synuclein (phospho Y125) antibody [EPR2179(2)] (ab124955)

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

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