abcam

Product datasheet

Anti-Alpha-synuclein (phospho S129) antibody ab42906

1 Abreviews 2 References 1 Image

Overview

Product name	Anti-Alpha-synuclein (phospho S129) antibody
Description	Rabbit polyclonal to Alpha-synuclein (phospho S129)
Host species	Rabbit
Specificity	This antibody is specific for the 15 kDa alpha Synuclein protein phosphorylated at serine 129. Immunolabelling is blocked by the phosphopeptide used as an antigen but not by the corresponding dephosphopeptide.
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Rat **Predicted to work with:** Mouse, Cow, Dog, Non human primates
Immunogen	Synthetic peptide corresponding to Rat Alpha-synuclein (phospho S129). Phosphopeptide corresponding to amino acid residues surrounding the phospho serine 129 of Rat alpha Synuclein. Database link: **P37840**
Positive control	Rat cortex lysate.
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. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.50 Constituents: 0.238% HEPES, 50% Glycerol, 0.87% Sodium chloride, 0.01% BSA
Purity	Immunogen affinity purified
Purification notes	Prepared from rabbit serum by affinity purification via sequential chromatography on phosph- and dephosphopeptide affinity columns.

Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab42906 in the following tested applications.

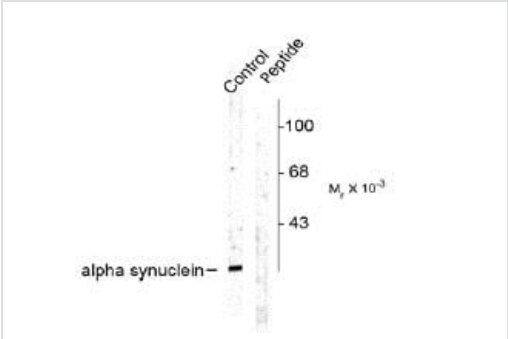
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000. Predicted molecular weight: 15 kDa.

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 dopaminergic neurons.

Images



Western blot - Anti-Alpha-synuclein (phospho S129) antibody (ab42906)

All lanes : Anti-Alpha-synuclein (phospho S129) antibody (ab42906) at 1/1000 dilution

Lane 1 : Rat cortex lysate at 20 µg
Lane 2 : Rat cortex lysate with immunogenic peptide 1ng

Predicted band size: 15 kDa

Western blot of rat cortex lysate showing specific labelling of the ~15kDa alpha Synuclein protein phosphorylated at serine 129, using ab42906 at a 1/1000 dilution. Immunolabeling is blocked by the phosphopeptide (peptide) used as immunogen.

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors