

### Anti-Alpha-synuclein antibody [LB 509] ab27766

★★★★★ **12 Abreviews** **76 References** 画像数 3

#### 製品の概要

製品名	Anti-Alpha-synuclein antibody [LB 509]
製品の詳細	Mouse monoclonal [LB 509] to Alpha-synuclein
由来種	Mouse
アプリケーション	<b>適用あり:</b> WB, Flow Cyt (Intra)
種交差性	<b>交差種:</b> Rat, Human, Recombinant fragment
免疫原	Full length protein. This information is proprietary to Abcam and/or its suppliers.
エピトープ	ab27766 reacts with an epitope located in the region encoded by amino acids 115-122 of alpha-synuclein.
ポジティブ・コントロール	WB: Recombinant human Alpha-synuclein protein. Flow Cyt (Intra): PC12 (NGF differentiated) cells.
特記事項	<p>Alpha-synuclein is expressed predominantly in the brain, where it is concentrated in presynaptic nerve terminals. The deposition of the abundant presynaptic brain protein alpha-synuclein as fibrillary aggregates in neurons or glial cells is a hallmark lesion in a subset of neurodegenerative disorders. These disorders include Parkinson's disease (PD), dementia with Lewy bodies (DLB) and multiple system atrophy, collectively referred to as synucleinopathies. Parkinson's disease (PD) is a common neurodegenerative disorder characterized by the progressive accumulation in selected neurons of protein inclusions containing alpha-synuclein and ubiquitin.</p> <p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact <a href="mailto:orders@abcam.com">orders@abcam.com</a>.</p> <p>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.</p> <p>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&amp;As</p>

#### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

	cycles.
バッファー	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine
精製度	Protein G purified
ポリ/モノ	モノクローナル
クローン名	LB 509
アイソタイプ	IgG1

## アプリケーション

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アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	★★★★★ (3)	1/100 - 1/1000. Predicted molecular weight: 14 kDa.
Flow Cyt (Intra)		Use 1µg for 10 <sup>6</sup> cells. <b>ab170190</b> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

## ターゲット情報

機能	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.
組織特異性	Expressed principally in brain but is also expressed in low concentrations in all tissues examined except in liver. Concentrated in presynaptic nerve terminals.
関連疾患	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
配列類似性	Belongs to the synuclein family.
ドメイン	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.
翻訳後修飾	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.

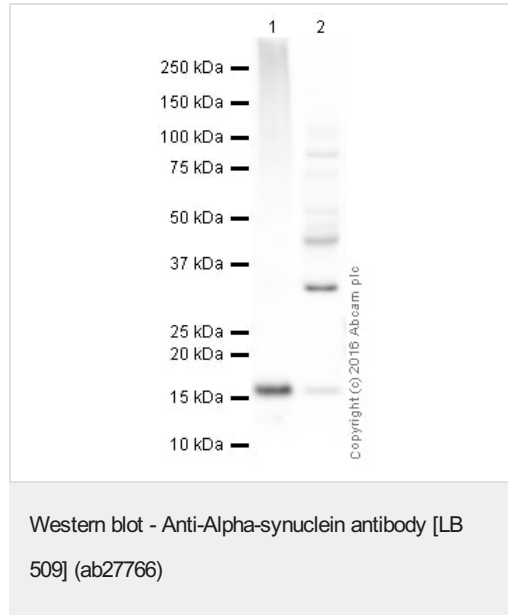
Ubiquitinated. The predominant conjugate is the diubiquitinated form.

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

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

## 細胞内局在

## 画像



**All lanes :** Anti-Alpha-synuclein antibody [LB 509] (ab27766) at 5  $\mu\text{g/ml}$

**Lane 1 :** Recombinant Human Alpha-synuclein protein (**ab51189**)

**Lane 2 :** Human brain hippocampus tissue lysate - total protein (**ab30180**)

Lysates/proteins at 10  $\mu\text{g}$  per lane.

### Secondary

**All lanes :** Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) at 1/5000 dilution

Developed using the ECL technique.

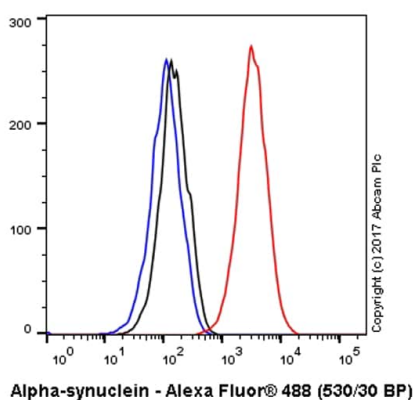
Performed under reducing conditions.

**Predicted band size:** 14 kDa

**Observed band size:** 16 kDa

**Additional bands at:** 32 kDa (possible dimer)

**Exposure time:** 20 minutes

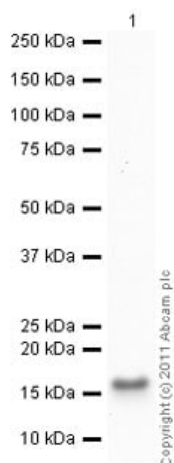


Flow Cytometry (Intracellular) - Anti-Alpha-synuclein antibody [LB 509] (ab27766)

Overlay histogram showing PC12 (NGF differentiated) cells stained with ab27766 (red line). The cells were fixed with 4% formaldehyde (10 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab27766, 1 µg/1x10<sup>6</sup>) for 30 min at 22°C. The secondary antibody used was Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) preadsorbed ([ab150117](#)) at 1/2000 dilution for 30 min at 22°C.

Isotype control antibody (black line) was Mouse IgG1 [15-6E10A7] ([ab170190](#)) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 50mW Blue laser (488nm) and 530/30 bandpass filter.



Western blot - Anti-Alpha-synuclein antibody [LB 509] (ab27766)

Anti-Alpha-synuclein antibody [LB 509] (ab27766) at 1/1000 dilution + Recombinant Human Alpha-synuclein protein ([ab51189](#)) at 0.1 µg

### Secondary

Goat Anti-Mouse IgG H&L (HRP) preadsorbed ([ab97040](#)) at 5000 µg

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 14 kDa

**Exposure time:** 8 minutes

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