




## Product datasheet

### Anti-pan Synuclein antibody ab6176

★★★★☆ [4 Abreviews](#) [16 References](#) [1 Image](#)

#### Overview

<b>Product name</b>	Anti-pan Synuclein antibody
<b>Description</b>	Rabbit polyclonal to pan Synuclein
<b>Host species</b>	Rabbit
<b>Specificity</b>	This antibody recognises all 3 forms of the synucleins.
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, IHC-Fr, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Rat, Human <b>Predicted to work with:</b> Mouse, Chicken, Cow, Xenopus laevis 
<b>Immunogen</b>	Synthetic peptide corresponding to Human pan Synuclein aa 1-100. The conjugate was cross-linked by maleimidocaproyl-N-hydroxy succinimide (MSC) and coupled to diphtheria toxoid.  <a href="#">Run BLAST with Expasy</a>  <a href="#">Run BLAST with NCBI</a>
<b>General notes</b>	<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>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7
<b>Purity</b>	Whole antiserum
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

#### Applications

## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab6176 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	★★★★★ (3)	Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration.
ICC/IF	★★★★★ (1)	Use a concentration of 1 µg/ml.

## Target

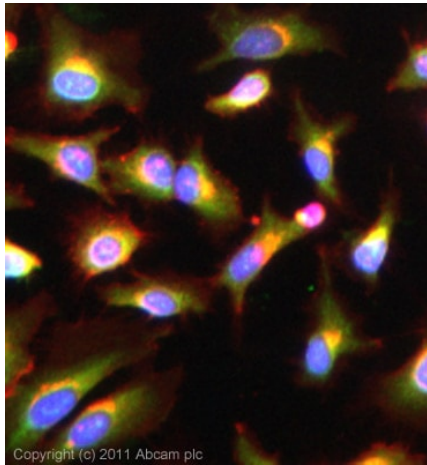
### Relevance

Synucleins are small, soluble proteins expressed primarily in neural tissue and in certain tumors. The family includes three known proteins: alpha, beta and gamma synucleins. Synuclein-alpha is primarily localized at the presynaptic region of axons and it may be involved in the regulation of dopamine release and transport. However, it can form filamentous aggregates that are the major non amyloid component of intracellular inclusions in several neurodegenerative diseases (synucleinopathies). Synuclein-alpha may induce fibrillization of the microtubule-associated protein tau and it reduces neuronal responsiveness to various apoptotic stimuli, leading to a decreased caspase 3 activation. Synuclein-alpha is involved in Parkinson's disease, Lewy body dementia, Brain iron accumulation type 1 (NBIA1, also called Hallervorden-Spatz syndrome) and it is a major non-amyloid component of the deposits associated with Alzheimer's disease. Synuclein-beta may be a regulator of the SNCA aggregation process. It protects neurons from staurosporine and 6 hydroxy dopamine (6OHDA)-stimulated caspase activation that also involves p53 and contributes to restore the SNCA anti-apoptotic function abolished by 6OHDA. Gamma synuclein is found primarily in the peripheral nervous system and retina. High levels of expression have been identified in advanced breast carcinomas suggesting a correlation between overexpression of SNCG and breast tumor development.

### Cellular localization

Neuronal cytosol and presynaptic terminals

## Images



Immunocytochemistry/ Immunofluorescence - Anti-pan Synuclein antibody (ab6176)

ICC/IF image of ab6176 stained HeLa cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab6176, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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

### 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