# abcam

## Product datasheet

## Anti-pan Synuclein antibody ab53726

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Overview

Product name Anti-pan Synuclein antibody

**Description** Rabbit polyclonal to pan Synuclein

Host species Rabbit

**Specificity** Detects endogenous levels of total Synuclein protein. This antibody recognises all forms of

synuclein (alpha, beta and gamma).

Tested applications Suitable for: WB, IHC-P

Species reactivity Reacts with: Rat, Human

Predicted to work with: Mouse

**Immunogen** Synthetic peptide within Human pan Synuclein aa 15-64. The exact sequence is proprietary.

Synthetic peptide derived from human synuclein.

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: 7.40

Preservative: 0.02% Sodium azide

Constituents: 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride, PBS

Without Mg+2 and Ca+2

Purity Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

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#### **Applications**

#### The Abpromise guarantee

Our Abpromise quarantee covers the use of ab53726 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)	1/500 - 1/1000. Detects a band of approximately 14 kDa (predicted molecular weight: 14 kDa).
IHC-P		Use at an assay dependent concentration.

### **Target**

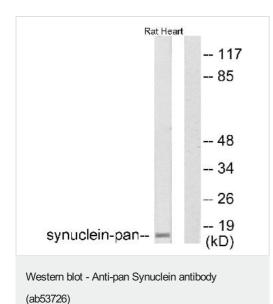
#### Relevance

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**



All lanes: Anti-pan Synuclein antibody (ab53726) at 1/500 dilution

Lane 1: rat heart lysate

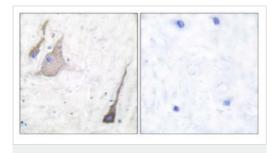
Lane 2: rat heart lysate with immunizing peptide

Lysates/proteins at 5 µg per lane.

Secondary

All lanes: Alkaline Phosphatase Goat Anti-Rabbit lgG (H+L)

**Predicted band size:** 14 kDa **Observed band size:** 14 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-pan Synuclein antibody (ab53726)

Ab53726 at 1/50 dilution, staining paraffin embedded human brain in the presence (right) or absence (left) of blocking peptide.

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
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- 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

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