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Datasheet for ABIN5650941

## anti-SNCA antibody (pSer129) (Atto 594)

### 5 Images

#### Overview

Quantity:	100 µL
Target:	SNCA
Binding Specificity:	AA 40-140, pSer129
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SNCA antibody is conjugated to Atto 594
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF), Immunocytochemistry (ICC)

#### Product Details

Immunogen:	Synthetic peptide of Human Alpha Synuclein pSer129 (40-140 aa), conjugated to Keyhole Limpet Haemocyanin (KLH).
Specificity:	Binds to phosphorylated serine 129 on alpha synuclein. Does not detect unphosphorylated serine 129 alpha synuclein. Detects bands at 100, 75, 45, 15 kDa. Bands above 15 kDa are oligomers.
Purification:	Peptide Affinity Purified

#### Target Details

Target:	SNCA
Alternative Name:	Alpha Synuclein ( <a href="#">SNCA Products</a> )

## Target Details

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**Background:** Alpha-Synuclein (SNCA) is expressed predominantly in the brain, where it is concentrated in presynaptic nerve terminals (1). Alpha-synuclein is highly expressed in the mitochondria of the olfactory bulb, hippocampus, striatum and thalamus (2). Functionally, it has been shown to significantly interact with tubulin (3), and may serve as a potential microtubule-associated protein. It has also been found to be essential for normal development of the cognitive functions, inactivation may lead to impaired spatial learning and working memory (4). SNCA fibrillar aggregates represent the major non A-beta component of Alzheimers disease amyloid plaque, and a major component of Lewy body inclusions, and Parkinson's disease. 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 (5, 6). Alpha synuclein phosphorylated at serine 129 constitutes 90 % of the alpha synuclein found in Lewy bodies (7, 8).

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**Gene ID:** 6622

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**NCBI Accession:** [NP\\_000336](#)

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**UniProt:** [P37840](#)

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**Pathways:** [Synaptic Membrane](#), [Regulation of G-Protein Coupled Receptor Protein Signaling](#), [Positive Regulation of Endopeptidase Activity](#), [Regulation of Carbohydrate Metabolic Process](#), [Platelet-derived growth Factor Receptor Signaling](#), [Negative Regulation of Transporter Activity](#), [Regulation of long-term Neuronal Synaptic Plasticity](#)

## Application Details

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**Application Notes:**

- WB (1:1000)
- ICC/IF (1:500)
- optimal dilutions for assays should be determined by the user.

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**Comment:** A 1:1000 dilution of ABIN5650941 was sufficient for detection of Alpha Synuclein pSer129 in 15 µg of human brain cell lysates by ECL immunoblot analysis using goat anti-rabbit IgG:HRP as the secondary antibody.

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**Restrictions:** For Research Use only

## Handling

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**Format:** Liquid

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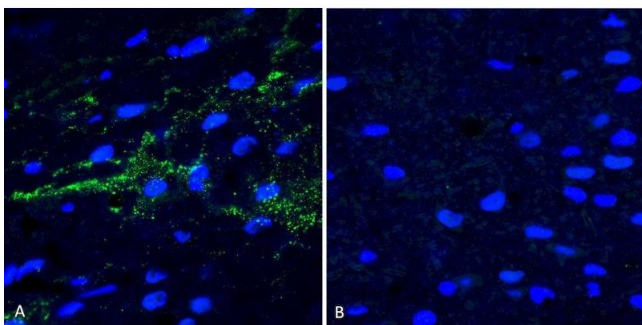
**Concentration:** 0.5 mg/mL

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## Handling

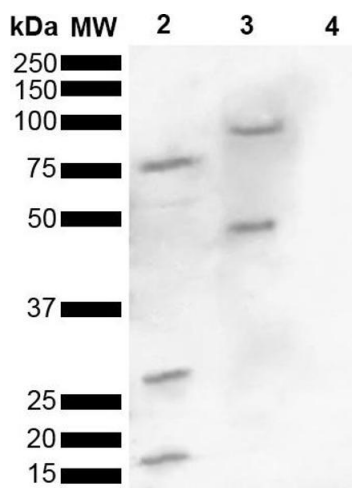
Buffer:	PBS pH 7.4, 50 % glycerol, 0.09 % Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	-20 °C

## Images



### Immunohistochemistry

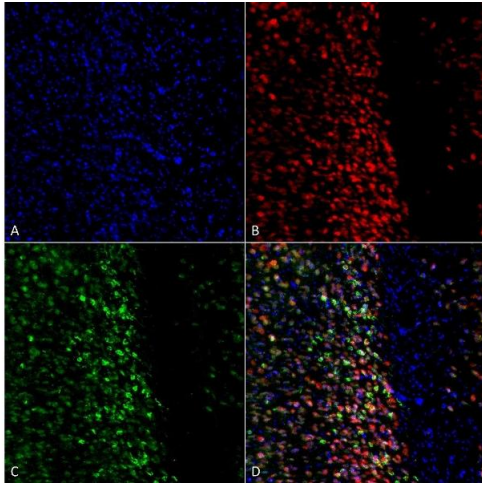
**Image 1.** Immunohistochemistry analysis using Rabbit Anti-Alpha Synuclein (pSer129) Polyclonal Antibody (ABIN5650941). Tissue: Free floating brain sections. Species: Mouse. Fixation: PFA. Primary Antibody: Rabbit Anti-Alpha Synuclein (pSer129) Polyclonal Antibody (ABIN5650941) at 1:500 for Overnight at 4C with gentle agitation. Counterstain: Hoechst. Magnification: 63X. A) Right hemisphere (striatum) injected with alpha synuclein AAV vector. B) Control. Alpha synuclein streaks are visible at injection site. Courtesy of: Trine Rasmussen, Simon Molgaard Jensen, Aarhus University.



### Western Blotting

**Image 2.** Western blot analysis of Human, Mouse brain lysate showing detection of ~16 kDa Alpha Synuclein pSer129 protein using Rabbit Anti-Alpha Synuclein pSer129 Polyclonal Antibody (ABIN5650941). Lane 1: Molecular Weight Ladder (MW). Lane 2: Human brain lysate. Lane 3: Mouse brain lysate. Lane 4: Alpha Synuclein Monomer (0.5 µg). Load: 15 µg. Block: 2.5 % BSA in TBST. Primary Antibody: Rabbit Anti-Alpha Synuclein pSer129 Polyclonal Antibody (ABIN5650941) at 1:1000 for 2 hours at RT. Secondary Antibody: Goat Anti-Rabbit HRP:IgG at 1:3000 for 1 hour at RT. Color Development: ECL solution for 5 min at RT. Predicted/Observed Size: ~16 kDa. Other Band(s): 100, 75,

45, 30,16 kDa.

**Immunocytochemistry**

**Image 3.** Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-Alpha Synuclein pSer129 Polyclonal Antibody (ABIN5650941). Tissue: Primary hippocampal neurons treated with active Alpha Synuclein Protein Aggregate (ABIN5065829) at 4 µg/mL to induce fibrils. Species: Rat. Fixation: 4% paraformaldehyde. Primary Antibody: Rabbit Anti-Alpha Synuclein pSer129 Polyclonal Antibody (ABIN5650941) at 1:500 for 24 hours at 4 °C. Secondary Antibody: Goat Anti-Rabbit Alexa Fluor 488 at 1:700 for 1 hour at RT. Counterstain: Guinea Pig Anti-NeuN (red) neuronal marker (Donkey Anti-Guinea Pig Alexa Fluor 647 1:700), Hoechst (blue) nuclear stain at 1:6000, 1:3000 for 60 min at RT, 5 min at RT. Magnification: 20X.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN5650941.