

## Datasheet: AHP1537

<b>Description:</b>	RABBIT ANTI ALPHA SYNUCLEIN (pSer129)
<b>Specificity:</b>	ALPHA SYNUCLEIN (pSer129)
<b>Format:</b>	Purified
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	0.1 ml

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			■	
Immunohistology - Frozen			■	
Immunohistology - Paraffin			■	
ELISA			■	
Immunoprecipitation			■	
Western Blotting (1)	■			1/1000
Immunofluorescence			■	

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

**(1) For the detection of phosphoproteins, serine phosphatase inhibitors such as 10mM Sodium Fluoride should be added to the sample buffer. Milk or other casein-based blocking solutions are not recommended as casein is a phosphoprotein and its use can result in high background.**

<b>Target Species</b>	Rat
<b>Species Cross Reactivity</b>	Based on sequence similarity, is expected to react with: Mouse, Dog, Primate, Human, Bovine <b>N.B.</b> Antibody reactivity and working conditions may vary between species.
<b>Product Form</b>	Purified IgG - liquid
<b>Antiserum Preparation</b>	Antisera to Alpha Synuclein (pSer129) were raised by repeated immunisations of rabbits with highly purified antigen. Purified IgG prepared by affinity chromatography.
<b>Buffer Solution</b>	10mM Hepes pH7.5, 150mM NaCl
<b>Preservative</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Stabilisers</b>	50% Glycerol 0.01% Bovine Serum Albumin

**Immunogen** Synthetic phosphopeptide corresponding to amino acid sequence surrounding phosphorylated serine 129 of Alpha Synuclein.

---

**External Database**

**Links**

**UniProt:**

[P37377](#) [Related reagents](#)

**Entrez Gene:**

[29219](#) Snca [Related reagents](#)

---

**Specificity**

**Rabbit anti Rat alpha synuclein (pSer129) antibody** recognizes alpha synuclein when phosphorylated at serine 129. Alpha synuclein is a 140 amino acid, ~15 kDa protein seen predominantly in the neocortex, hippocampus, substantia nigra, thalamus and cerebellum. Its normal cellular function has not been definitively determined, but it is thought to be involved in the regulation of neuronal plasticity, dopamine neurotransmission and other membrane-associated processes at the presynaptic terminal.

Alpha synuclein is normally a soluble, unfolded protein, but it can aggregate at high concentrations to form insoluble fibrils which, in association with other proteins such as ubiquitin, neurofilament protein and alpha B crystalline, form Lewy bodies. Lewy bodies are a hallmark pathological feature of Parkinson's disease and other neurodegenerative diseases. Alpha synuclein has several possible phosphorylation sites, serine 129 in particular can be phosphorylated by G-protein-coupled receptor kinases and this phosphorylation promotes formation of alpha synuclein filaments, with hyperphosphorylation of serine129 seen in Lewy bodies.

---

**Western Blotting**

AHP1537 detects a band of approximately 15kDa in rat cortex lysate.

---

**References**

1. Smith, W. W. *et al* (2005) Alpha-Synuclein Phosphorylation Enhances Eosinophilic Cytoplasmic Inclusion Formation in SH-SY5Y Cells. [J. Neurosci. 25: 5544-5552.](#)

---

**Storage**

Store at +4°C or at -20°C if preferred.  
Storage in frost-free freezers is not recommended.  
This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

---

**Shelf Life**

18 months from date of despatch.

---

**Health And Safety Information**

Material Safety Datasheet documentation #10088 available at:  
10088: <https://www.bio-rad-antibodies.com/uploads/MSDS/10088.pdf>

---

**Regulatory**

For research purposes only

---

## Related Products

### Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)  
Sheep Anti Rabbit IgG (STAR35...) [RPE](#)  
Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)  
Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)  
Sheep Anti Rabbit IgG (2AB02...) [Biotin](#)

Sheep Anti Rabbit IgG (STAR36...)

[DyLight®488](#), [DyLight®549](#), [DyLight®649](#),  
[DyLight®680](#), [DyLight®800](#)

**North & South America** Tel: +1 800 265 7376  
Fax: +1 919 878 3751  
Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide** Tel: +44 (0)1865 852 700  
Fax: +44 (0)1865 852 739  
Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe** Tel: +49 (0) 89 8090 95 21  
Fax: +49 (0) 89 8090 95 50  
Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

'M294600:161006'

**Printed on 01 May 2018**

---

© 2018 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)