

# Datasheet: AHP1238

Description:	RABBIT ANTI SYNAPSIN I (pSer549)		
Specificity:	SYNAPSIN I (pSer549)		
Format:	Purified		
Product Type:	Polyclonal Antibody		
Isotype:	Polyclonal IgG		
Quantity:	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.

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

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, tyrosine phosphatase inhibitors such as 1mM Sodium Orthovanadate 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.

Target Species	Rat	
Species Cross Reactivity	Based on sequence similarity, is expected to react with:Human, Bov <b>N.B.</b> Antibody reactivity and working conditions may vary between s	
Product Form	Purified IgG - liquid	
Antiserum Preparation	Antisera to synapsin I (pSer 549) were raised by repeated immunisa purified antigen. Purified IgG prepared by affinity chromatography.	ations of rabbits with highly
Buffer Solution	10mM Hepes pH7.5	
Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> ) 0.01% Bovine Serum Albumin 50% Glycerol	

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Phosphopeptide corresponding to amino acid sequence surrounding the phosphorylated serine 549 of synapsin I.

## External Database Links

#### **UniProt:**

P09951 Related reagents

#### **Entrez Gene:**

24949 Syn1 Related reagents

### **Specificity**

Rabbit anti Rat synapsin I (pSer549) antibody recognizes synapsin I, also known as Syn1, when phosphorylated at serine 549. Synapsin I is a ~78 kDa member of the synapsin family, expressed in the central and peripheral nervous system. Synapsins coat synaptic vesicles, binding them to the cytoskeleton and are thought to regulate their availability for release. Synapsins are important in brain plasticity, axonogenesis and synaptogenesis. Mutations in the synapsin I gene may be associated with disorders such as X-linked recessive epilepsy associated with variable learning disabilities and behavior disorders.

Phosphorylation of serine residue 549 by MAP kinase or cyclin-dependent kinases 1 or 5 is an important part in modulating synaptic vesicle trafficking.

#### Western Blotting

AHP1238 detects a band of approximately 78kDa in rat cortex cell lysates.

#### References

- 1. Baldelli, P. *et al.* (2005) Synapsins and neuroexocytosis: recent views from functional studies on synapsin null mutant mice. Arch Ital Biol. 143 (2): 113-26.
- 2. Garcia, C.C. *et al.* (2004) Identification of a mutation in synapsin I, a synaptic vesicle protein, in a family with epilepsy. J Med Genet. 41 (3): 183-6.

#### Storage

Shelf Life

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.

12 months from date of despatch.

# Health And Safety Information

Material Safety Datasheet documentation available at:

Material Safety Datasheet Documentation #10088 available at:

 $\underline{https://www.bio\text{-}rad\text{-}antibodies.com/uploads/MSDS/10088.pdf}$ 

# 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®800

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'M294465:161004'

#### Printed on 08 Mar 2018

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