

Datasheet: AHP1497

Description:	RABBIT ANTI PRESENILIN-1
Specificity:	PRESENILIN-1
Other names:	PSEN1
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.1 mg

## **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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			•	
Immunohistology - Frozen			•	
Immunohistology - Paraffin (1)	-			2.5ug/ml
ELISA			•	
Immunoprecipitation			•	
Western Blotting	-			0.5 - 1.0ug/ml
Functional Assays			•	

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)This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.

Target Species	Human
Species Cross Reactivity	Reacts with: Rat, Mouse  N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.
Product Form	Purified IgG - liquid

Antiserum Preparation	Antiserum to human Presenilin-1 was raised by repeated immunisation of rabbits with highly purified antigen. Purified IgG was prepared from whole serum by affinity chromatography.		
Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	0.02% Sodium Azide (NaN <sub>3</sub> )		
Approx. Protein Concentrations	IgG concentration 1.0mg/ml		
Immunogen	A 23 amino acid peptide from near the carboxy terminus of human presenilin-1.		
External Database Links	UniProt:  P49768 Related reagents  Entrez Gene:  5663 PSEN1 Related reagents		
Synonyms	AD3, PS1, PSNL1		
RRID	AB_2172891		
Specificity	<b>Rabbit anti Human Presinilin-1 antibody</b> recognizes human Presenilin-1, a 52.7 kDa membrane protein expressed in a wide range of tissues including various regions of the brain, liver, spleen and lymph nodes.		
	Presenilin-1 was originally identified as a marker of susceptibility for familial early onset Alzheimer's disease type 3 (AD3). Presenilin-1, along with PEN2, Nicastrin and APH-1, forms the gamma-secretase protein complex, a membrane-bound aspartyl protease that catalyzes the intramembrane cleavage of integral membrane proteins such as Notch receptors and APP. Cleavage of these proteins is a key step in signalling from several cell-surface receptors and is believed to be required for the generation of neurotoxic amyloid peptides that are central in the development of Alzheimer's disease.		
	At least 6 isoforms of Presenilin-1 exist.		
	Rabbit anti Human Presinilin-1 antibody ( <b>AHP1497</b> ) is specific for Presenilin-1 and shows no cross reactivity with Presenilin-2.		
Histology Positive Control Tissue	Human brain		
Western Blotting	AHP1497 detects a band of approximately 44kDa in human brain cell lysates.		
Further Reading	1. Periz, G. & Fortini, M.E. (2004) Functional reconstitution of gamma-secretase through coordinated expression of presenilin, nicastrin, Aph-1, and Pen-2. <u>J Neurosci Res. 77 (3):</u>		

#### 309-22.

- 2. Weihofen, A. & Martoglio, B. (2003) Intramembrane-cleaving proteases: controlled liberation of proteins and bioactive peptides. <u>Trends Cell Biol.</u> 13 (2): 71-8.
- 3. Selkoe, D.J. (1998) The cell biology of beta-amyloid precursor protein and presentlin in Alzheimer's disease. <u>Trends Cell Biol. 8 (11): 447-53.</u>
- 4. Sherrington, R., *et al.* (1995) Cloning of a gene bearing missense mutations in early-onset familial Alzheimer's disease. <u>Nature</u>; 375:754-60

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.

Guarantee 18 months from date of despatch.

Health And Safety Material Safety Datasheet documentation #10040 available at:
10040: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a>

**Regulatory** For research purposes only

### Related Products

# **Recommended Secondary Antibodies**

Sheep Anti Rabbit IgG (STAR34...) FITC

Goat Anti Rabbit IgG (H/L) (STAR124...) HRP

Goat Anti Rabbit IgG (Fc) (STAR121...) Biotin, FITC, HRP

Sheep Anti Rabbit IgG (STAR35...) RPE

Sheep Anti Rabbit IgG (STAR36...) DyLight®488, DyLight®680, DyLight®800

## **Recommended Useful Reagents**

ANTIGEN RETRIEVAL BUFFER, pH8.0 (BUF025A)

100x ANTIGEN RETRIEVAL BUFFER, pH8.0 (BUF025C)

TidyBlot WESTERN BLOT DETECTION REAGENT:HRP (STAR209P)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

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