



Rabbit polyclonal antibody to Presenilin 1 (1-20): IgG

Catalogue No.:	R-1605-500
Description:	Presenilin-1 (PSEN1) is a multi-pass membrane protein and component of the gamma-secretase complex. PSEN1 is thought to play a role in intracellular signaling and gene expression or in linking chromatin to the nuclear membrane. It may also play a role in hematopoiesis. Defects in PSEN1 are a cause of Alzheimer disease type 3 (AD3), a familial early-onset form of Alzheimer disease (Ref:SWISS-Prot).
Batch No.:	See product label
Unit size:	500 µg
Antigen:	A synthetic peptide corresponding to a region (1-20 aa) from the N-terminus of human Presenilin 1 conjugated to Diphtheria toxoid.
Sequence:	MTELPAPLSYFQNAQMSEDN-C
Antibody Type:	Polyclonal
Other Names:	Presenilin 1; PS-1; Protein S182; PS1-CTF12; PSEN1; AD3; PS1; PSNL1;
Accession:	P49768 PSN1_HUMAN;
Produced in:	Rabbit
Applications:	IF and WB. Suggested dilution of 1:2,000 is recommended for WB. On SDS-PAGE, the predominant form detected by this antibody is the N-terminal Presenilin 1 fragment of approx 29 kDa. The uncleaved form of Presenilin 1 migrates to approx 45 kDa. Human and mouse brain samples commonly prepared with reducing agent (50mM DTT), urea (2.3M), SDS (1%) in 62.5 mM Tris-HCl pH 6.8 sample buffer heated to 50C for 15 min. The suggested dilution for IF is 1:100 for acetone or paraformaldehyde fixed cells or tissue. Biosensis recommends that the optimal working dilution should be determined by the end user.
Specificity:	Specificity confirmed by WB and IF using transfected cells, Presenilin 1 knock-out mouse cells, mouse and human brain.
Species Against:	Human; mouse; rat; guinea pig. Expected to cross-react with other species due to sequence homology.
Conjugate:	Diphtheria toxoid covalently linked to additional Cys residue using maleimidocaproyl-N-hydroxysuccinimide
Form:	Lyophilized from PBS, pH 7.4. Contains no preservative.
Reconstitution:	Reconstitute in 500 µL of sterile water. Centrifuge to remove any insoluble material.
Storage:	Short term storage at 2-8°C for one week. At -20°C as an undiluted liquid for up to 12 months.
Expiry Date:	12 months after purchase
References:	1. Culvenor, J.G., Ilaya, N.T., Ryan, M.T., Canterford, L., Hoke, D., Williamson, N.A., McLean, C.A., Masters, C.L., and 1. Evin, G. (2004) Characterization of Presenilin complex from mouse and human brain using Blue Native gel electrophoresis reveals high expression in embryonic brain and minimal change in complex mobility with Presenilin mutations. Eur. J. Biochem. 271, 375-385. 2. Ilaya, N.T., Evin, G., Masters, C.L., and Culvenor, J.G. (2004) Nicastrin expression in mouse

FOR RESEARCH USE ONLY

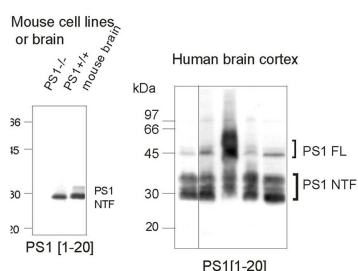
Rabbit polyclonal antibody to Presenilin 1 (1-20): IgG

peripheral tissues is not co-ordinated with Presenilin and is high in muscle. *J. Neurochem.* 91, 230-237.

3. Beher, D., Fricker, M., Nadin, A., Clarke, E.E., Wrigley, J.D.J., Li, Y.-M., CULVENOR, J.G., Masters, C.L., Harrison, T., and Shearman, M.S. (2003) In vitro Characterization of the Presenilin-dependent γ -secretase complex using a novel affinity ligand. *Biochem.* 42, 8133-8142.

4. Evin, G., Smith, M.J., Tziotis, A., McLean, C., Canterford, L., Sharples, R.A., Cappai, R., Weidemann, A., Beyreuther, K., Cotton, R.G.H., Masters, C.L., and Culvenor, J.G. (2002) Alternative transcripts of Presenilin-1 associated with Frontotemporal Dementia. *NeuroReport* 13, 917-921.

5. Silveyra, M.-X., Evin, G., Montenegro, M.-F., Vidal, C.J., Martínez, S., Culvenor, J.G., and Sáez-Valero, J. (2008) Presenilin-1 interacts with acetylcholinesterase and alters its enzymatic activity and glycosylation. *Mol. Cell Biol.* 210, 788-792.



Western Immunoblotting of human and mouse Presenilin 1 protein in mouse cell line extracts and mouse and human brain. Membrane protein load 20 μ g. Crude anti-PS1 NT used at 1:2000.

FOR RESEARCH USE ONLY