

Basic Information

Product Name	Anti-Presenilin 1/PSEN1 Antibody		
Gene Name	PSEN1		
Source	Rabbit		
Clonality	Polyclonal		
Isotype	IgG		
Species Reactivity	human, mouse, rat		
Tested Application	WB, ICC/IF, FCM, ELISA		
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.		
Immunogen	E.coli-derived human Presenilin 1/PS-1/PSEN1 recombinant protein (Position: M1-K76).		
Concentration	500 ug/ml		
Purification	Immunogen affinity purified.		
Observed MW	53 kDa		
Dilution Ratios	Western blot (WB):	1:500-2000	
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400	
	Flow Cytometry (Fixed):	1:50-200	
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000	

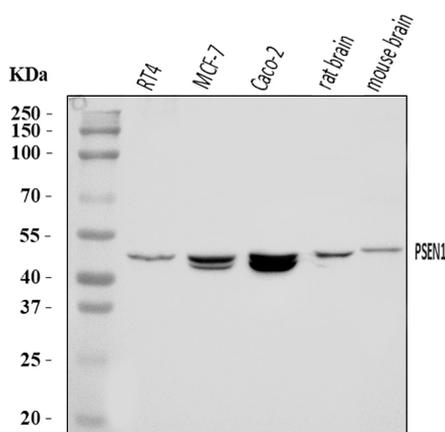
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

Presenilin-1 (PS-1) is a presenilin protein that in humans is encoded by the PSEN1 gene. Alzheimer's disease (AD) patients with an inherited form of the disease carry mutations in the presenilin proteins (PSEN1; PSEN2) or in the amyloid precursor protein (APP). These disease-linked mutations result in increased production of the longer form of amyloid-beta (main component of amyloid deposits found in AD brains). Presenilins are postulated to regulate APP processing through their effects on gamma-secretase, an enzyme that cleaves APP. Also, it is thought that the presenilins are involved in the cleavage of the Notch receptor, such that they either directly regulate gamma-secretase activity or themselves are protease enzymes. Several alternatively spliced transcript variants encoding different isoforms have been identified for this gene, the full-length nature of only some have been determined.

Selected Validation Data



Western blot analysis of Presenilin 1/PSEN1 using anti-Presenilin 1/PSEN1 antibody (A00138-3). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: RT4 whole cell lysates,

Lane 2: MCF-7 whole cell lysates,

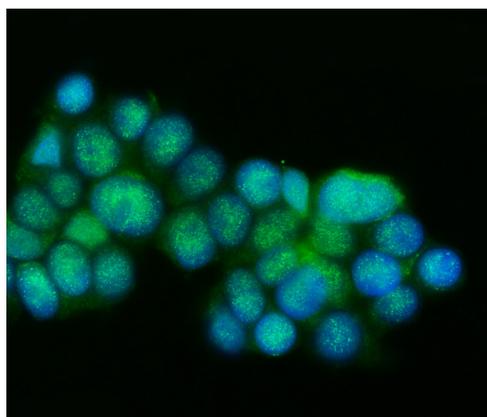
Lane 3: Caco-2 whole cell lysates,

Lane 4: rat brain tissue lysates,

Lane 5: mouse brain tissue lysates.

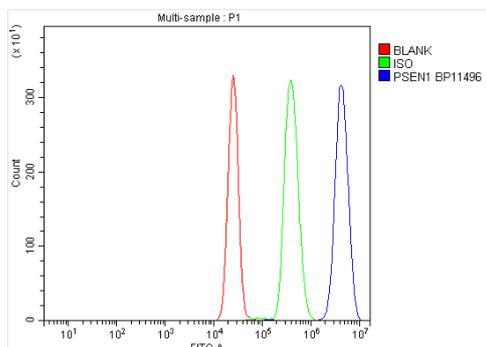
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-Presenilin 1/PSEN1 antigen affinity purified polyclonal antibody (A00138-3) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Presenilin 1/PSEN1 at approximately 53 kDa. The expected band size for Presenilin 1/PSEN1 is at 53 kDa.



ICC/IF analysis of Presenilin 1/PSEN1 using anti-Presenilin 1/PSEN1 antibody (A00138-3).

Presenilin 1/PSEN1 was detected in an immunocytochemical section of RT4 cells. The section was incubated with rabbit anti-Presenilin 1/PSEN1 Antibody (A00138-3) at a dilution of 1:100. Fluoro488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of K562 cells using anti-Presenilin 1/PSEN1 antibody (A00138-3).

Overlay histogram showing K562 cells stained with A00138-3 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Presenilin 1/PSEN1 Antibody (A00138-3) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.