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Anti-Presenilin 2 Antibody

Catalog # ABO10681

Product Information

Application	WB, IHC-P
Primary Accession	P49810
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Presenilin-2(PSEN2) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	5664
Other Names	Presenilin-2, PS-2, 3.4.23.-, AD3LP, AD5, E5-1, STM-2, Presenilin-2 NTF subunit, Presenilin-2 CTF subunit, PSEN2, AD4, PS2, PSNL2, STM2
Calculated MW	50140
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Rat, Mouse, By Heat Western blot, 0.1-0.5 □g/ml, Human, Rat, Mouse
Subcellular Localization	Endoplasmic reticulum membrane ; Multi-pass membrane protein . Golgi apparatus membrane ; Multi-pass membrane protein .
Tissue Specificity	Isoform 1 is seen in the placenta, skeletal muscle and heart while isoform 2 is seen in the heart, brain, placenta, liver, skeletal muscle and kidney. .
Source	Eukaryota
Protein Name	Presenilin-2(PS-2)
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human Presenilin 2(39-51aa EDGENTAQWRSQE), different from the related mouse and rat sequences by two amino acids.
Purification	Immunogen affinity purified.

Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the peptidase A22A family.

Protein Information

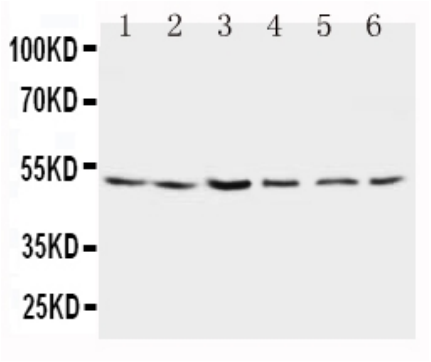
Name	PSEN2 (HGNC:9509)
Function	Catalytic subunit of the gamma-secretase complex, an endoprotease complex that catalyzes the intramembrane cleavage of integral membrane proteins such as Notch receptors and APP (amyloid- beta precursor protein) (PubMed:10497236, PubMed:10652302, PubMed:16752394, PubMed:27293189, PubMed:36272978). Selectively cleaves late endosomal/lysosomal localized substrates and generates the prominent pool of intracellular amyloid beta that contains longer amyloid beta (PubMed:27293189). The holoprotein functions as a calcium- leak channel that allows the passive movement of calcium from endoplasmic reticulum to cytosol and is involved in calcium homeostasis (PubMed:16959576). Is a regulator of mitochondrion-endoplasmic reticulum membrane tethering and modulates calcium ions shuttling between ER and mitochondria (PubMed:21285369).
Cellular Location	Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Late endosome membrane. Lysosome membrane. Note=Late endosome/lysosome localization is dependent of the phosphorylation-mediated interaction with the AP1G1 (PubMed:27293189). Also highly enriched in mitochondria-associated endoplasmic reticulum membrane contact site (By similarity) {ECO:0000250|UniProtKB:Q61144, ECO:0000269|PubMed:27293189}
Tissue Location	[Isoform 1]: Expressed in the placenta, skeletal muscle and heart (PubMed:8574969). Expressed in the somatodendritic compartment of hippocampal neurons (PubMed:27293189)

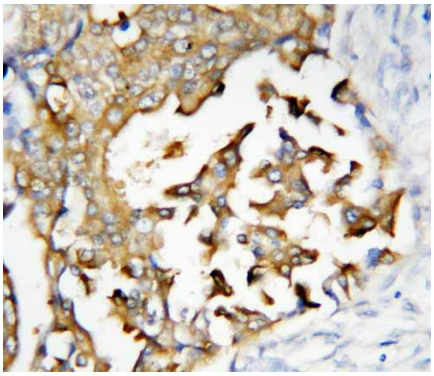
Background

Presenilin-2 is a protein that in humans is encoded by the PSEN2 gene. Kovacs et al.(1996) demonstrated that the expression patterns of PS1 and PS2 in the brain are extremely similar to each other and that messages for both are primarily detectable in neuronal populations. Immunochemical analyses indicated that PS1 and PS2 are similar in size and localize to similar intracellular compartments(endoplasmic reticulum and Golgi complex). Li et al.(1997) demonstrated that wildtype PS1 and PS2 are localized to the nuclear membrane, its associated interphase kinetochores, and the centrosomes.In melanocytic cells PSEN2 gene expression may be regulated by MITF.

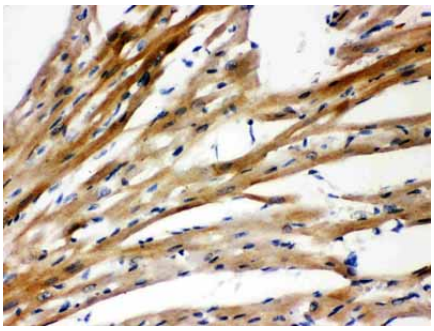
Images

Anti-Presenilin 2 antibody, ABO10681, Western blottingLane 1: Rat Brain Tissue Lysate Lane 2: Rat Brain Tissue Lysate Lane 3: MCF-7 Cell Lysate Lane 4: HELA Cell Lysate Lane 5: SMMC Cell Lysate Lane 6: CEM Cell Lysate

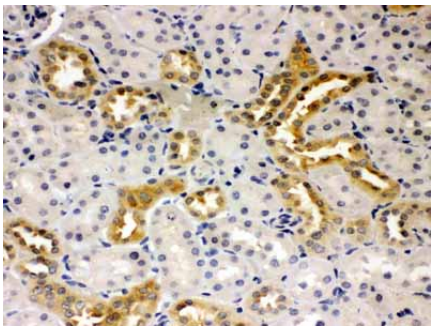




Anti-Presenilin 2 antibody, ABO10681, IHC(P)IHC(P): Human Mammary Cancer Tissue



Anti-Presenilin 2 antibody, ABO10681, IHC(P)IHC(P): Rat Cardiac Muscle Tissue



Anti-Presenilin 2 antibody, ABO10681, IHC(P)IHC(P): Rat Kidney Tissue

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.