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Anti-Presenilin 2 Antibody
Catalog # ABO10681

Specification

Anti-Presenilin 2 Antibody - 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.

Anti-Presenilin 2 Antibody - 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 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/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. .

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.

Anti-Presenilin 2 Antibody - Protein Information

Name PSEN2

Synonyms AD4, PS2, PSNL2, STM2

Function
Probable 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). Requires the other members of the gamma- secretase complex to have a protease activity. May play a role in intracellular signaling and gene expression or in linking chromatin to the nuclear membrane. May function in the cytoplasmic partitioning of proteins. 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

Tissue Location
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.

Anti-Presenilin 2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation

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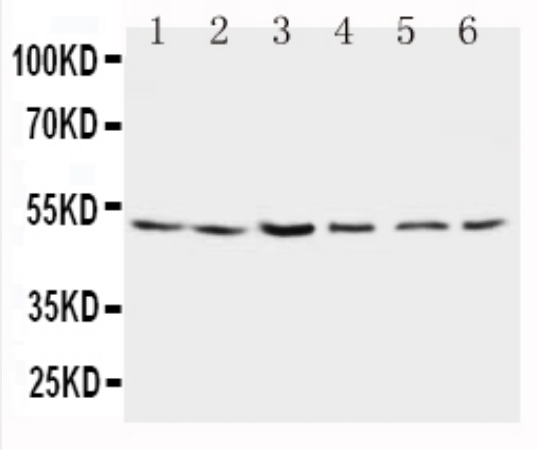
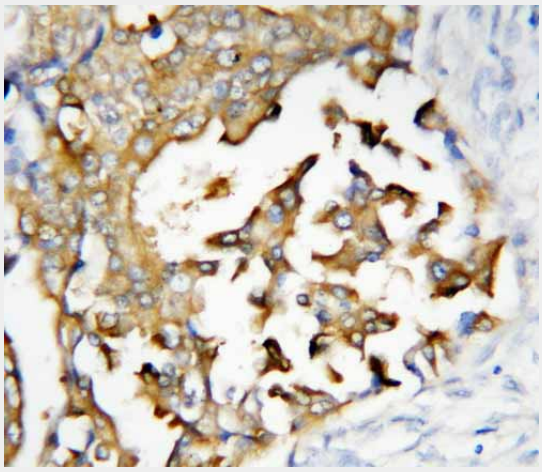
- Flow Cytomety
- Cell Culture

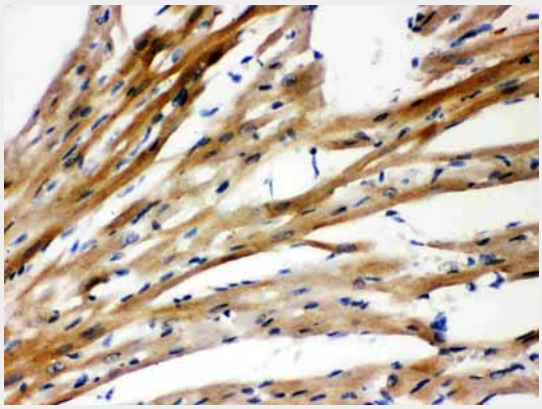
Anti-Presenilin 2 Antibody - Images



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

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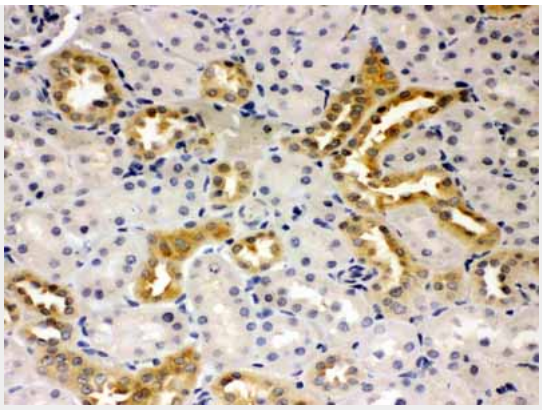

Anti-Presenilin 2 antibody, ABO10681, IHC(P)IHC(P): Rat Kidney Tissue

Anti-Presenilin 2 Antibody - 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.