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PEN2 Antibody

Rabbit mAb
Catalog # AP92028

Product Information

Application	WB, IHC, IF, FC, ICC, IHF
Primary Accession	Q9NZ42
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	PEN 2; PSEN2; psenen;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	12029

Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human PEN2
Description	Essential subunit of the gamma-secretase complex, an endoprotease complex that catalyzes the intramembrane cleavage of integral membrane proteins such as Notch receptors and APP (beta-amyloid precursor protein).
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	PSENEN
Synonyms	PEN2
Function	Essential 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:12522139, PubMed:12679784, PubMed:12740439, PubMed:12763021, PubMed:24941111, PubMed:30598546, PubMed:30630874). The gamma-secretase complex plays a role in Notch and Wnt signaling cascades and regulation of downstream processes via its role in processing key regulatory proteins, and by regulating cytosolic CTNNB1 levels (Probable). PSENEN modulates both endoproteolysis of presenilin and gamma-secretase activity (PubMed:12522139, PubMed:12679784, PubMed:12740439, PubMed:12763021, PubMed:24941111). Besides its role in gamma-secretase complex, acts as a regulator of AMP-activated protein kinase (AMPK) activity in response to calorie restriction: binds metformin, an antidiabetic drug, promoting association with ATP6AP1, a subunit of the

V-ATPase complex, leading to V-ATPase complex inhibition on lysosomes and AMPK activation via the AXIN1-STK11/LKB1 axis (By similarity).

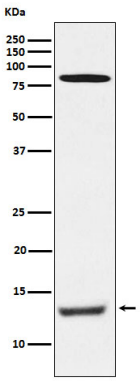
Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus, Golgi stack membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Membrane; Multi-pass membrane protein Note=Predominantly located in the endoplasmic reticulum and in the cis- Golgi.

Tissue Location

Widely expressed. Expressed in leukocytes, lung, placenta, small intestine, liver, kidney, spleen thymus, skeletal muscle, heart and brain.

Images



Western blot analysis of PEN2 expression in Human placenta lysate.

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