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PCSK9 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5447

Product Information

Application	FC, WB
Primary Accession	Q8NBP7
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	74286
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	255738
Antigen Region	144-173
Other Names	Proprotein convertase subtilisin/kexin type 9, 3421-, Neural apoptosis-regulated convertase 1, NARC-1, Proprotein convertase 9, PC9, Subtilisin/kexin-like protease PC9, PCSK9, NARC1
Dilution	FC~~1:25 WB~~1:1000
Target/Specificity	This PCSK9 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 144-173 amino acids from the N-terminal region of human PCSK9.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PCSK9 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PCSK9
Synonyms	NARC1

Function	Crucial player in the regulation of plasma cholesterol homeostasis. Binds to low-density lipid receptor family members: low density lipoprotein receptor (LDLR), very low density lipoprotein receptor (VLDLR), apolipoprotein E receptor (LRP1/APOER) and apolipoprotein receptor 2 (LRP8/APOER2), and promotes their degradation in intracellular acidic compartments (PubMed:18039658). Acts via a non- proteolytic mechanism to enhance the degradation of the hepatic LDLR through a clathrin LDLRAP1/ARH-mediated pathway. May prevent the recycling of LDLR from endosomes to the cell surface or direct it to lysosomes for degradation. Can induce ubiquitination of LDLR leading to its subsequent degradation (PubMed:17461796, PubMed:18197702, PubMed:18799458, PubMed:22074827). Inhibits intracellular degradation of APOB via the autophagosome/lysosome pathway in a LDLR-independent manner. Involved in the disposal of non-acetylated intermediates of BACE1 in the early secretory pathway (PubMed:18660751). Inhibits epithelial Na(+) channel (ENaC)-mediated Na(+) absorption by reducing ENaC surface expression primarily by increasing its proteasomal degradation. Regulates neuronal apoptosis via modulation of LRP8/APOER2 levels and related anti-apoptotic signaling pathways.
Cellular Location	Cytoplasm. Secreted. Endosome. Lysosome. Cell surface. Endoplasmic reticulum. Golgi apparatus. Note=Autocatalytic cleavage is required to transport it from the endoplasmic reticulum to the Golgi apparatus and for the secretion of the mature protein Localizes to the endoplasmic reticulum in the absence of LDLR and colocalizes to the cell surface and to the endosomes/lysosomes in the presence of LDLR. The sorting to the cell surface and endosomes is required in order to fully promote LDLR degradation
Tissue Location	Expressed in neuro-epithelioma, colon carcinoma, hepatic and pancreatic cell lines, and in Schwann cells

Background

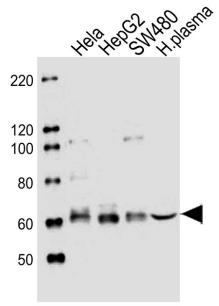
PCSK9 is a proprotein convertase belonging to the proteinase K subfamily of the secretory subtilase family. This protein is synthesized as a soluble zymogen that undergoes autocatalytic intramolecular processing in the endoplasmic reticulum. The protein may function as a proprotein convertase. The protein plays a role in cholesterol homeostasis and may have a role in the differentiation of cortical neurons.

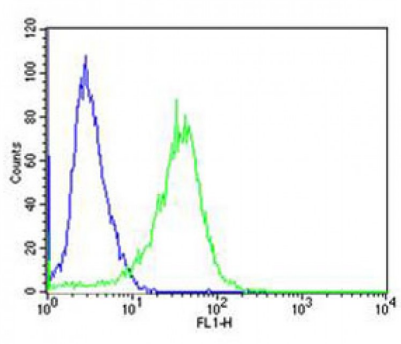
References

Abifadel,M., Rabes,J.P. Hum. Mutat. 30 (7), E682-E691 (2009)
McNutt,M.C., Kwon,H.J. J. Biol. Chem. 284 (16), 10561-10570 (2009)
Shioji,K., Mannami,T. J. Hum. Genet. 49 (2), 109-114 (2004)
Abifadel,M., Varret,M. Nat. Genet. 34 (2), 154-156 (2003)

Images

All lanes : Anti-PCSK9 Antibody (N-term) at 1:1000 dilution Lane 1: Hela whole cell lysates Lane 2: HepG2 whole cell lysates Lane 3: SW480 whole cell lysates Lane 4: human plasma lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size : 74 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Flow cytometric analysis of A431 cells using PCSK9 Antibody (N-term) (green, Cat#AW5447) compared to an isotype control of rabbit IgG(blue). AW5447 was diluted at 1:25 dilution. An Alexa Fluor® 488 goat anti-rabbit lgG at 1:400 dilution was used as the secondary antibody.

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