

NARC1/PCSK9 Rabbit pAb

Catalog # AP99974

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q8NBP7
Other Accession	Q8NBP7
Host	Rabbit
Clonality	Polyclonal
Calculated MW	74286
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PCSK9/NARC1
Epitope Specificity	231-330/692
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the peptidase S8 family. Contains 1 peptidase S8 domain.
SUBUNIT	The precursor protein but not the mature protein may form multimers.
Post-translational modifications	The soluble zymogen undergoes autocatalytic intramolecular processing in the endoplasmic reticulum, resulting in the cleavage of its propeptide that remains associated with the secreted enzyme.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	May be implicated in the differentiation of cortical neurons and may play a role in cholesterol homeostasis.

Additional Information

Gene ID	255738
Other Names	FH3; FHCL3; HCHOLA3; LDLCQ1; NARC-1; NARC1; PC9; PCSK9_HUMAN; PCSK9; Neural apoptosis-regulated convertase 1 (NARC-1); Proprotein convertase 9 (PC9); Subtilisin/kexin-like protease PC9; 3.4.21.-; PCSK9_MOUSE; PCSK9_RAT; proprotein convertase subtilisin/kexin type 9; hypercholesterolemia, autosomal dominant 3
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,Flow-Cyt=2ug/Test
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

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