

## PCSK9 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20995c

## **Specification**

# PCSK9 Antibody (C-term) - Product Information

Application WB,E
Primary Accession Q8NBP7
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 74286

# PCSK9 Antibody (C-term) - Additional Information

### **Gene ID 255738**

#### **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

# **Target/Specificity**

This PCSK9 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 654-688 amino acids from the C-terminal region of human PCSK9.

#### **Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

### **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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# PCSK9 Antibody (C-term) - 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

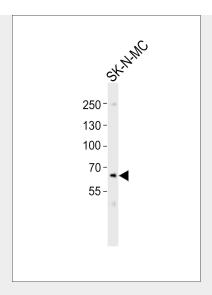
## PCSK9 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# PCSK9 Antibody (C-term) - Images





Western blot analysis of lysate from SK-N-MC cell line, using PCSK9 Antibody (C-term)(Cat. #AP20995c). AP20995c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.

# PCSK9 Antibody (C-term) - Background

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. 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. 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. 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.

## PCSK9 Antibody (C-term) - References

Chiang L.W.,et al.Patent number WO0131007, 03-MAY-2001. Ding K.,et al.PLoS ONE 2:E1098-E1098(2007). Ota T.,et al.Nat. Genet. 36:40-45(2004). Gregory S.G.,et al.Nature 441:315-321(2006). Mural R.I.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

### PCSK9 Antibody (C-term) - Citations

• The Association of Proprotein Convertase Subtilisin/Kexin Type 9 to Plasma Low-Density Lipoproteins: An Evaluation of Different Methods