

PCSK9 (aa164-175) Antibody (internal region) Peptide-affinity purified goat antibody Catalog # AF2546a

## **Specification**

# PCSK9 (aa164-175) Antibody (internal region) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Concentration Isotype Calculated MW WB <u>O8NBP7</u> <u>NP\_777596.2</u>, <u>255738</u> Human Goat Polyclonal 0.5 mg/ml IgG 74286

## PCSK9 (aa164-175) Antibody (internal region) - Additional Information

Gene ID 255738

**Other Names** 

Proprotein convertase subtilisin/kexin type 9, 3.4.21.-, Neural apoptosis-regulated convertase 1, NARC-1, Proprotein convertase 9, PC9, Subtilisin/kexin-like protease PC9, PCSK9, NARC1

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PCSK9 (aa164-175) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

## PCSK9 (aa164-175) Antibody (internal region) - 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:<a href="http://www.uniprot.org/citations/18039658" target="\_blank">18039658</a>). 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:<a href="http://www.uniprot.org/citations/18799458" target="\_blank">18799458</a>, PubMed:<a href="http://www.uniprot.org/citations/17461796" target="\_blank">18799458</a>, PubMed:<a href="http://www.uniprot.org/citations/17461796" target="\_blank">18197702</a>, PubMed:<a href="http://www.uniprot.org/citations/18197702" target="\_blank">18197702</a>, PubMed:<a href="http://www.uniprot.org/citations/22074827" target="\_blank">22074827</a>). 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:<a href="http://www.uniprot.org/citations/18660751" target="\_blank">18660751</a>). 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

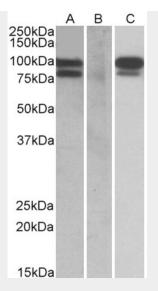
## PCSK9 (aa164-175) Antibody (internal region) - Protocols

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

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

PCSK9 (aa164-175) Antibody (internal region) - Images





HEK293 lysate (10ug protein in RIPA buffer) overexpressing Human PCSK9 with C-terminal MYC tag probed with AF2546a (0.5ug/ml) in Lane A and probed with anti-MYC Tag (1/1000) in lane C. Mock-transfected HEK293 probed with AF2546a (1mg/ml) in Lane B. Primary incubations were for 1 hour. Detected by chemiluminescence.

# PCSK9 (aa164-175) Antibody (internal region) - References

Wild-type PCSK9 inhibits LDL clearance but does not affect apoB-containing lipoprotein production in mouse and cultured cells. Lalanne F, Lambert G, Amar MJ, Chetiveaux M, Zair Y, Jarnoux AL, Ouguerram K, Friburg J, Seidah NG, Brewer HB Jr, Krempf M, Costet P. J Lipid Res. 2005 Jun;46(6):1312-9. Epub 2005 Mar 1. PMID: 15741654