



# Anti-PCSK9 Reference Antibody (Schering patent anti-PCSK9)

Recombinant Antibody Catalog # APR11005

## **Product Information**

**Application** FC, Kinetics, Animal Model

Primary Accession <u>O8NBP7</u>

Reactivity Human, Mouse
Clonality Monoclonal

Isotype IgG1 Calculated MW 74286

### **Additional Information**

Target/Specificity PCSK9

**Endotoxin** 

**Conjugation** Unconjugated

**Expression system** CHO Cell

**Format** Purified monoclonal antibody supplied in PBS, pH6.0, without

preservative. This antibody is purified through a protein A column.

#### **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:<u>18197702</u>, PubMed:<u>18799458</u>, PubMed:<u>22074827</u>). 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:<u>18660751</u>).

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.

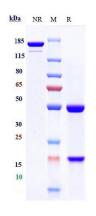
#### **Cellular Location**

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

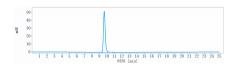
#### **Tissue Location**

Expressed in neuro-epithelioma, colon carcinoma, hepatic and pancreatic cell lines, and in Schwann cells

# **Images**



Anti-PCSK9 Reference Antibody (Schering patent anti-PCSK9) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%



The purity of Anti-PCSK9 Reference Antibody (Schering patent anti-PCSK9)is more than 95%, determined by SEC-HPLC.

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