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Anti-PCSK9 Reference Antibody (alirocumab)

Recombinant Antibody
Catalog # APR10068

Specification

Anti-PCSK9 Reference Antibody (alirocumab) - Product Information

Application	**FC, E, FTA**
Primary Accession	Q8NBP7
Reactivity	**Cynomolgus, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**146.24 KDa**

Anti-PCSK9 Reference Antibody (alirocumab) - Additional Information

Target/Specificity
PCSK9

Endotoxin
< 0.001EU/ μg,determined by LAL method.

Conjugation
Unconjugated

Expression system
CHO Cell

Format
Purified monoclonal antibody supplied in 100mM Pro-Ac, 20mM Arg, pH5.0, without preservative.This antibody is purified through a protein A column.

Anti-PCSK9 Reference Antibody (alirocumab) - 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:<a href="http://www.uniprot.org/citations/18197702"

target="_blank">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

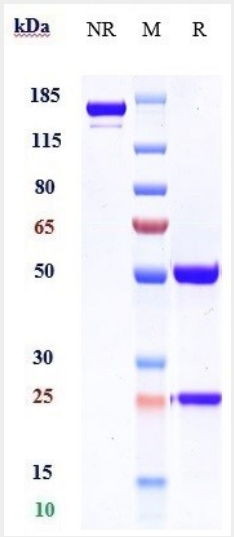
Tissue Location
Expressed in neuro-epithelioma, colon carcinoma, hepatic and pancreatic cell lines, and in Schwann cells

Anti-PCSK9 Reference Antibody (alirocumab) - 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
- Cell Culture

Anti-PCSK9 Reference Antibody (alirocumab) - Images



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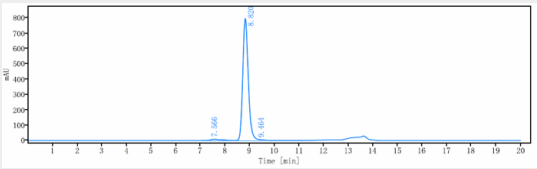
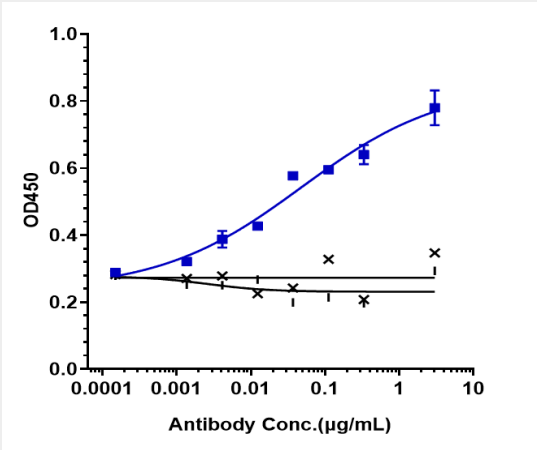
Anti-PCSK9 Reference Antibody (alirocumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-PCSK9 Reference Antibody (alirocumab)is more than 96.96% ,determined by SEC-HPLC.



Immobilized human PCSK9 chis at 2 μg/mL can bind Anti-PCSK9 Reference Antibody (alirocumab)EC50=0.04823 μg/mL