ARG56535
anti-PCSK9 antibody

Package: 250 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PCSK9
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PCSK9
Species	Human
Immunogen	Human recombinant PCSK9.
Conjugation	Un-conjugated
Alternate Names	PC9; Subtilisin/kexin-like protease PC9; Proprotein convertase 9; Proprotein convertase subtilisin/kexin type 9; Neural apoptosis-regulated convertase 1; FH3; EC 3.4.21.-; HCHOLA3; NARC1; LDLCQ1; NARC-1

Application Instructions

Application table

Application	Dilution
ICC/IF	Assay-dependent
WB	1:200

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

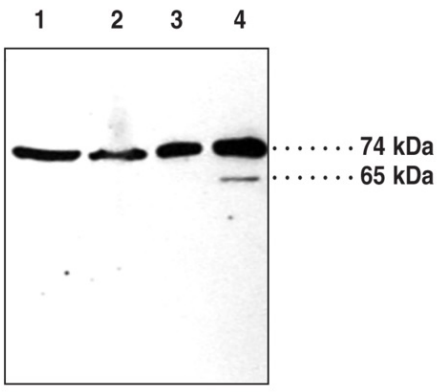
Form	Liquid
Purification	Purification with Protein A.
Buffer	TBS (pH 7.4)
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	PCSK9
Gene Full Name	proprotein convertase subtilisin/kexin type 9

Background	This gene encodes a member of the subtilisin-like proprotein convertase family, which includes proteases that process protein and peptide precursors trafficking through regulated or constitutive branches of the secretory pathway. The encoded protein undergoes an autocatalytic processing event with its prosegment in the ER and is constitutively secreted as an inactive protease into the extracellular matrix and trans-Golgi network. It is expressed in liver, intestine and kidney tissues and escorts specific receptors for lysosomal degradation. It plays a role in cholesterol and fatty acid metabolism. Mutations in this gene have been associated with autosomal dominant familial hypercholesterolemia. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2014]
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. 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. [UniProt]
Highlight	Related products: PCSK9 antibodies; PCSK9 ELISA Kits; Anti-Rabbit IgG secondary antibodies; Related news: Cholesterol, the weakness of anaplastic large cell lymphoma (ALCL)
Calculated Mw	74 kDa
PTM	Cleavage by furin and PCSK5 generates a truncated inactive protein that is unable to induce LDLR degradation. Undergoes autocatalytic cleavage in the endoplasmic reticulum to release the propeptide from the N-terminus and the cleavage of the propeptide is strictly required for its maturation and activation. The cleaved propeptide however remains associated with the catalytic domain through non-covalent interactions, preventing potential substrates from accessing its active site. As a result, it is secreted from cells as a propeptide-containing, enzymatically inactive protein. Phosphorylation protects the propeptide against proteolysis.

Images



ARG56535 anti-PCSK9 antibody WB image

Western blot: 1) 40 µg of Mouse heart (10,000 x g supernatant), 2) 50 µg of Mouse liver (10,000 x g supernatant), 3) 2 µl of PCSK9 Western Ready Control, and 4) 5 µl of PCSK9 Western Ready Control stained with ARG56535 anti-PCSK9 antibody.