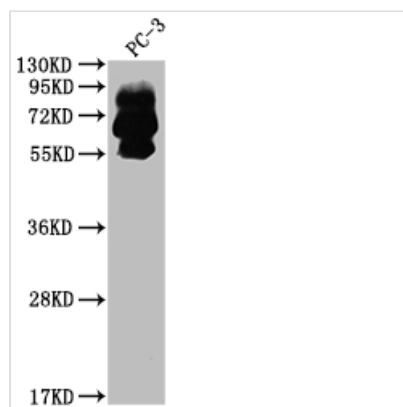




PCSK9 Recombinant Monoclonal Antibody

Product Code	CSB-RA259644A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q8NBP7
Immunogen	A synthesized peptide derived from human PCSK9
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	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:18799458, PubMed:17461796, PubMed:18197702, 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.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Cardiovascular; Cell biology; Metabolism; Signal transduction; Stem cells
Gene Names	PCSK9
Clone No.	7F2
Image	



Western Blot

Positive WB detected in: PC-3 whole cell lysate

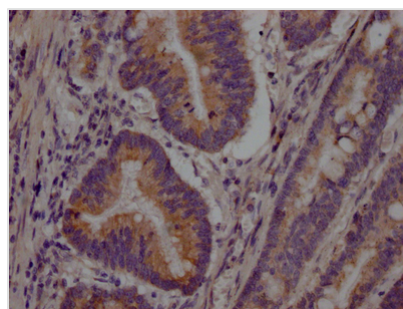
All lanes: PCSK9 antibody at 1:2000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 75, 21 kDa

Observed band size: 60, 75 kDa



IHC image of CSB-RA259644A0HU diluted at 1:100 and staining in paraffin-embedded human colon cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

The DNA sequence coming from the PCSK9 monoclonal antibody produced from the synthesized human PCSK9 peptide immunization was cloned into the expression vector, which was further transfected into a cell line for in vitro expression. The product is the recombinant PCSK9 monoclonal antibody. It specifically targets the PCSK9 from human. It belongs to the rabbit IgG. The affinity-chromatography purification method was used to purify this PCSK9 antibody. The ELISA, WB, and IHC analyses have been tested for this PCSK9 antibody.

The dyslipidemia treatment based on PCSK9 monoclonal antibodies is currently recommended to achieve risk-specific low-density lipoprotein cholesterol (LDL-C) goal to reduce adverse cardiovascular (CV) events. Two fully human anti-PCSK9 antibodies evolocumab and alirocumab developed by transgenic mice platforms have been approved for hypercholesterolemia treatment in the clinical.