

**Anti-PCSK9 Antibody**  
Catalog # ABO11438**Specification****Anti-PCSK9 Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">Q8NBP7</a>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Proprotein convertase subtilisin/kexin type 9(PCSK9) detection. Tested with WB, IHC-P in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-PCSK9 Antibody - 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

**Calculated MW**

74286 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

Cytoplasm. Secreted. Endosome. Lysosome. Cell surface. Endoplasmic reticulum. Golgi apparatus. 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 Specificity**

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

**Protein Name**

Proprotein convertase subtilisin/kexin type 9

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

### Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human PCSK9(671-687aa AVTAVAICCRSRHLAQA).

### Purification

Immunogen affinity purified.

### Cross Reactivity

No cross reactivity with other proteins

### Storage

**At -20°C for one year. After r<sup>o</sup>Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.**

### Sequence Similarities

Belongs to the peptidase S8 family.

## Anti-PCSK9 Antibody - 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/17461796" target="\_blank">17461796</a>, PubMed:<a href="http://www.uniprot.org/citations/18197702" target="\_blank">18197702</a>, PubMed:<a href="http://www.uniprot.org/citations/18799458" target="\_blank">18799458</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

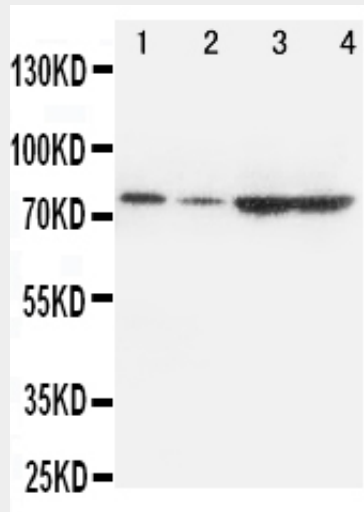
Expressed in neuro-epithelioma, colon carcinoma, hepatic and pancreatic cell lines, and in Schwann cells

### Anti-PCSK9 Antibody - Protocols

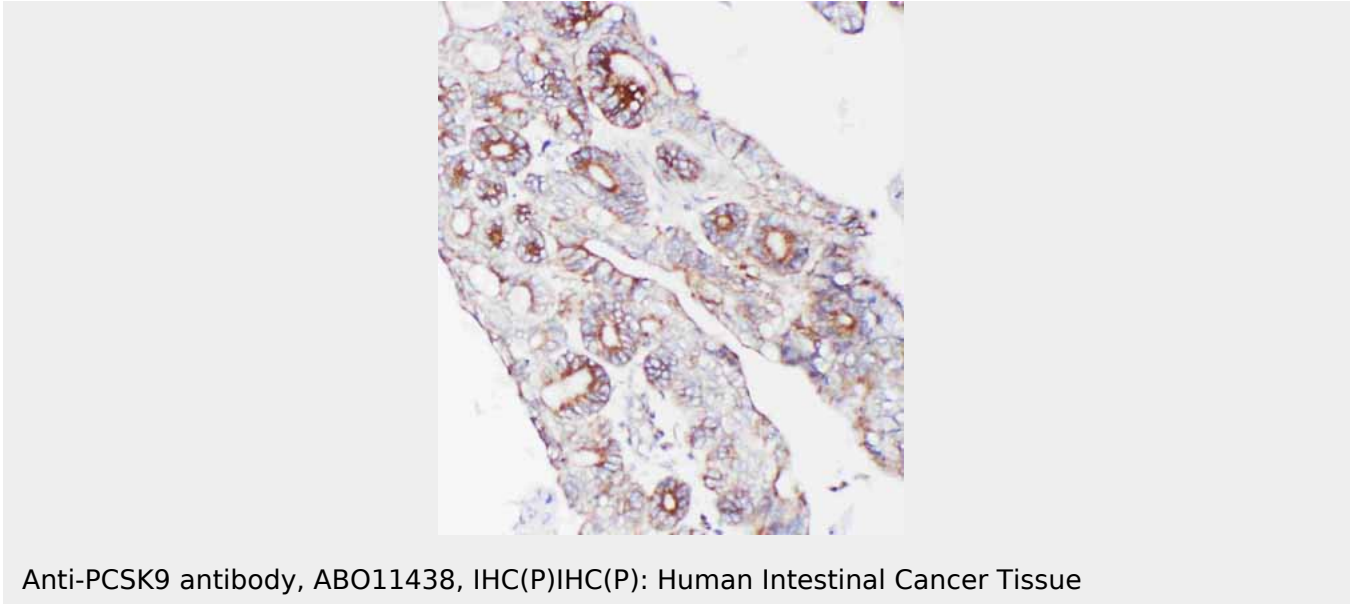
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-PCSK9 Antibody - Images



Anti-PCSK9 antibody, ABO11438, Western blotting  
All lanes: Anti PCSK9 (ABO11438) at 0.5ug/ml  
Lane 1: A549 Whole Cell Lysate at 40ug  
Lane 2: HELA Whole Cell Lysate at 40ug  
Lane 3: U87 Whole Cell Lysate at 40ug  
Lane 4: PANC Whole Cell Lysate at 40ug  
Predicted bind size: 74KD  
Observed bind size: 74KD



Anti-PCSK9 antibody, ABO11438, IHC(P)IHC(P): Human Intestinal Cancer Tissue

### **Anti-PCSK9 Antibody - Background**

Proprotein convertase subtilisin/kexin type 9, also known as PCSK9, is an enzyme that in humans is encoded by the PCSK9 gene. This gene encodes a proprotein convertase belonging to the proteinase K subfamily of the secretory subtilase family. By genomic sequence analysis, PCSK9 was mapped to chromosome 1p32. This gene is a crucial player in the regulation of plasma cholesterol homeostasis. It may prevent the recycling of LDLR from endosomes to the cell surface or direct it to lysosomes for degradation. PCSK9 can induce ubiquitination of LDLR leading to its subsequent degradation. This gene is involved in the disposal of non-acetylated intermediates of BACE1 in the early secretory pathway.