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Anti-PCSK9/Proprotein Convertase 9 Rabbit Monoclonal Antibody

Catalog # ABO13798

Product Information

Application	WB, IP
Primary Accession	Q8NBP7
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-PCSK9/Proprotein Convertase 9 Rabbit Monoclonal Antibody . Tested in WB, IP applications. This antibody reacts with Human.

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
Application Details	WB 1:500-1:2000 IP 1:20
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.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: ABFB-16
Immunogen	A synthesized peptide derived from human PCSK9

Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

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: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

Images

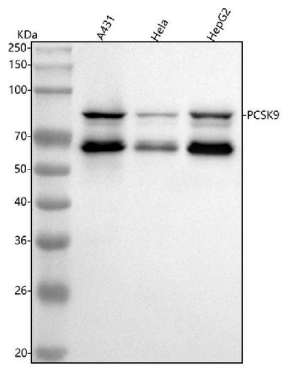


Figure 1. Western blot analysis of PCSK9 using anti-PCSK9 antibody (M00085).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours.
The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human A431 whole cell lysates,
Lane 2: human Hela whole cell lysates,
Lane 3: human HepG2 whole cell lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes.
Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PCSK9 antigen affinity purified monoclonal antibody

(Catalog # M00085) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for PCSK9 at approximately 75 kDa. The expected band size for PCSK9 is at 75 kDa.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.