

Human PCSK9 ELISA Kit

Catalog No: #EK5497



Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

Description

Product Name	Human PCSK9 ELISA Kit
Specificity	Human
Crossing Reactivity	There is no detectable cross-reactivity with other relevant proteins.
Immunogen Type	NSO,S153-Q692
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; PSEC0052;
Accession No.	Q8NBP7
Cell Localization	Cytoplasm. Secreted. Endosome. Lysosome.Cell surface. Endoplasmic reticulum. Golgi apparatus.Autocatalytic cleavage is required to transport it from theendoplasmic reticulum to the Golgi apparatus and for the secretionof the mature protein.

Application Details

sensitivity:10pg mlDetect Range:156pg ml-10 000pg ml
sample_type:cell culture supernates cell lysates tissue homogenates serum and plasma (heparin EDTA).capture_antibody:monoclonal antibody from mousedetection_antibody:polyclonal antibody from goatgene_name:PCSK9protein_name:Proprotein convertase subtilisin kexin type 9gene_full_name:Proprotein convertase subtilisin kexin type 9tissue_specificity: Expressed in neuro-epithelioma coloncarcinoma hepatic and pancreatic cell lines and in Schwanncells.sequence_similarities:Belongs to the peptidase S8 family.

tmb_incubation:20-25minresearch_category:signal transduction|metabolism|amino acids|cardiovascular|lipids / lipoproteins|lipid metabolism|cholesterol metabolism|stem cells|neural stem cells|intracellular|cell biology|proteolysis / ubiquitin|proteolytic enzymes|serine protease|proprotein convertases|pathways and processes|metabolic signaling pathways|lipid and lipoprotein metabolism|amino acid metabolism|types of disease|cancer

Product Description

Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human PCSK9

Background

protein_function: Crucial player in the regulation of plasma cholesterolhomeostasis. Binds to low-density lipid receptor family members:low density lipoprotein receptor (LDLR), very low densitylipoprotein receptor (VLDLR), apolipoprotein E receptor(LRP1,APOER) and apolipoprotein receptor 2 (LRP8,APOER2), andpromotes their degradation in intracellular acidic compartments(PubMed:18039658). Acts via a non-proteolytic mechanism to enhancethe degradation of the hepatic LDLR through a clathrinLDLRAP1,ARH-mediated pathway. May prevent the recycling of LDLRfrom endosomes to the cell surface or direct it to lysosomes fordegradation. Can induce ubiquitination of LDLR leading to ittssubsequent degradation (PubMed:18799458, PubMed:17461796, PubMed:18197702, PubMed:22074827). Inhibits intracellulardegradation of APOB via the autophagosome,lysosome pathway in aLDLR-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 expressionprimarily by increasing its proteasomal degradation. Regulatesneuronal apoptosis via modulation of LRP8,APOER2 levels andrelated anti-apoptotic signaling pathways..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, the PCSK9 gene was mapped to chromosome 1p32. This protein plays a major regulatory role in cholesterol homeostasis. PCSK9 binds to the epidermal growth factor-like repeat A(EGF-A) domain of the low-density lipoprotein receptor(LDLR), inducing LDLR degradation. Reduced LDLR levels result in decreased metabolism of low-density lipoproteins(LDL), which could lead to hypercholesterolemia. PCSK9 may also have a role in the differentiation of cortical neurons.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.