

Datasheet for ABIN2666529

PCSK9 Protein (AA 29-692, C-Term)[Go to Product page](#)

Overview

Quantity:	10 µg
Target:	PCSK9
Protein Characteristics:	AA 29-692, C-Term
Origin:	Human
Source:	CHO Cells
Protein Type:	Recombinant
Biological Activity:	Active
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Purity:	> 90 % , as determined by Coomassie stained SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 1 EU per µg protein as determine by the LAL method.

Target Details

Target:	PCSK9
Alternative Name:	PCSK9 (PCSK9 Products)
Background:	Protein convertase subtilisin/kexin 9 (PCSK9) possesses a signal peptide (aa 1-30), a prosegment (PRO) (aa 31-152), a catalytic domain (aa 153-407), a hinge region (aa 408-452), and a C-terminal Cys-His-rich domain (CHRD) (aa 453-692). This protein is primarily synthesized and secreted by hepatocytes. Besides liver, it is also expressed in the small

Target Details

intestine, kidney, and brain, and it is present in plasma. Upon translocation to the endoplasmic reticulum, the prosegment of PCSK9 is autocatalytically cleaved at the VFAQ152QSIP site and secreted as a stable, enzymatically inactive, non-covalent complex. Elevated low density lipoprotein-cholesterol (LDLc) level is a major risk factor for cardiovascular disease and atherosclerosis. LDLc is cleared from circulation by the LDL receptor (LDLR), PCSK9 is a regulator of LDLc levels through the binding of LDLR, subsequently leading to the degradation of LDLR. Therefore, it is biologically plausible that drugs inhibiting PCSK9 would lower heart attacks and other diseases caused by increased cholesterol. PCSK9 also binds to other LDLR family members such as very low density lipoprotein receptor (VLDLR), apolipoprotein E receptor (LRP1/APOER), and apolipoprotein receptor 2 (LRP8/APOER2), which lead to their degradation in the intracellular acidic compartments. Like the LDLR, gene expression of PCSK9 is positively regulated by SREBP-2, a transcription factor that is activated in response to cellular cholesterol depletion.

Molecular Weight:	Predicted molecular mass of approximately 73 kDa. It migrates as 70 and 17 kDa for mature and prodomain, respectively, in DTT-reducing conditions and 63 and 17 kDa in non-reducing conditions by SDS-PAGE.
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Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Comment:	Biological activity: Human PCSK9 binds human LDLR. The amount of human LDLR bound in assay conditions is determined by ELISA.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Reconstitution:	For maximum results, quick spin vial prior to opening.
Buffer:	0.22 µm filtered protein solution is in 25 mM sodium Acetate, 150 mM NaCl, pH 5.0.
Handling Advice:	Avoid repeated freeze/thaw cycles.
Storage:	-20 °C
Storage Comment:	Unopened vial can be stored between 2°C and 8° for one month, at -20°C for three months, or at -70°C for six months.