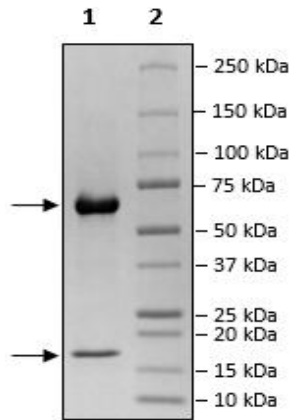


Product Information

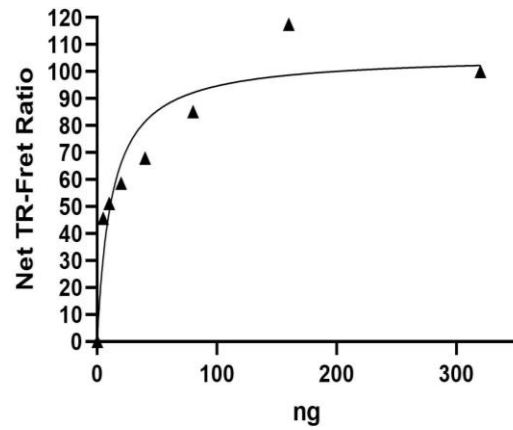
Description:	Human PCSK9 (proprotein convertase subtilisin/kexin type 9), also known as FH3, HCHOLA3, and PC9, encompassing amino acids 31-692(end). This construct contains a C-terminal His-tag (6xHis) followed by an Avi-tag™. This protein was affinity purified and enzymatically biotinylated using Avi-tag™ technology.
Background:	PCSK9 (proprotein convertase subtilisin/kexin type 9), also known as FH3, HCHOLA3, and PC9, belongs to the proprotein convertase family of protein and is a crucial player in the regulation of plasma cholesterol homeostasis. It is synthesized in an inactive form, which is converted into the mature active form by proprotein convertases. It binds to the ectodomain of the following hepatic low-density lipoprotein 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. PCSK9 acts via a non-proteolytic mechanism to enhance the degradation of the hepatic LDLR through a clathrin LDLRAP1/ARH-mediated pathway, targeting the complex to the lysosomes. PCSK9 inhibition allows LDLR to be recycled, and further cycles of LDL removal from circulation. The use inhibitors targeting PCSK9 have been approved by the FDA since 2015, such as the monoclonal antibody evolocumab. Further studies and drug development will bring into light the importance of this protein in lipoprotein homeostasis.
Species:	Human
Construct:	PCSK9 (31-692(end)-His-Avi)-(Biotin)
Concentration:	2.18 mg/ml
Expression System:	HEK293
Purity:	≥90%
Format:	Aqueous buffer solution.
Formulated In:	8 mM phosphate, pH 7.4, 110 mM NaCl, 2.2 mM KCl, and 20% glycerol
MW:	Mature: 60 kDa + glycans; Prodomain: 14 kDa
Glycosylation:	This protein runs at a higher MW by SDS-PAGE due to glycosylation.
Genbank Accession:	NM_174936
Label:	This protein is enzymatically biotinylated using Avi-Tag™ technology. Biotinylation confirmed to be ≥90%.
Stability:	At least 6 months at -80°C.
Storage:	-80°C
Instructions for Use:	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
Assay Conditions:	Assay was performed according to PCSK9-LDLR TR-FRET Assay Kit (BPS Bioscience #72010) with PCSK9 [Biotinylated] enzyme titrated at various amounts.
Applications:	Useful for studying binding to LDLR.

Quality Control Data

4-20% SDS-PAGE Coomassie Staining



PCSK9-LDLR Binding



Biotin-Avidin Pulldown

