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Recombinant Human Proprotein Convertase 9/PCSK9

DESCRIPTION	CATALOG #	SIZE	PRICE	INVENTORY
Recombinant Human Proprotein Convertase 9/PCSK9	SPI-DT-001-10	10 µg	\$150	In Stock
	SPI-DT-001-20	20 µg	\$250	In Stock
	SPI-DT-001-50	50 µg	\$450	In Stock

Synonym: FH3, HCHOLA3, LDLCQ1, NARC-1, NARC1, PC9

Background:

Proprotein convertase subtilisin/kexintype9 (PCSK9) is encoded by PCSK9 gene of 2076 bp cDNA for a 75 kDa (692 amino acids) proprotein. The proprotein is then cleaved by autocatalytic intramolecular processing in the endoplasmic reticulum for a mature enzyme of 62 kDa. The mature PCSK9 binds to the epidermal growth factor-like repeat A (EGF-A) domain of the low-density lipoprotein receptor (LDLR), promoting LDLR degradation. Reduced LDLR levels result in decreased metabolism of LDL-cholesterol, which could lead to hypercholesterolemia.

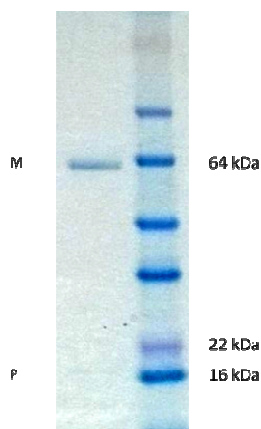
Source: Recombinant human PCSK9 was expressed in human cell line, HEK293.

NCBI DNA Sequence: NM_174936

NCBI Protein Sequence: NP_777596.2

Characterization: Mature form & pro domain. A cDNA encoding the human proprotein convertase 9 (NP_777596.2) (Met 1-Gln 692) was expressed in HEK293 cells with a C-terminal polyhistidine tag.

Purity: > 95% by SDS-PAGE and visualized by SimplyBlue™ SafeStain (Invitrogen).

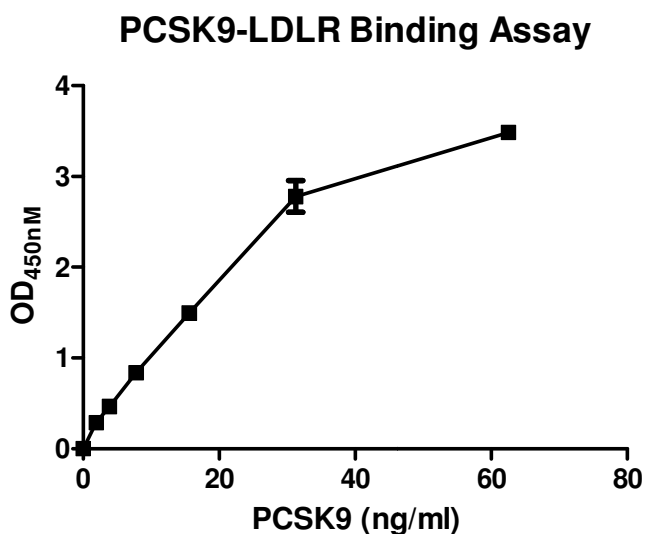


Expression and purification of recombinant human proprotein convertase subtilisin/kexin type 9 (PCSK9). Full-length human PCSK9 was expressed in HEK293 cells. Secreted PCSK9 proteins were purified with Talon® Metal Affinity Resin (Clontech Laboratories, Inc), followed by Superdex 75 size exclusion chromatography (GE Life Science). One micrograms of purified PCSK9-HIS (for histidine) was analyzed by 4-20 % SDS-PAGE and stained with SimplyBlue SafeStain (Invitrogen). M and P denote the mature PCSK9 (amino acids 153–692) and the prodomain (amino acids 29–152), respectively.

Endotoxin Level: < 1.0 EU per 1 µg of the protein by the LAL method.

SDS-PAGE: 19 kDa & 62 kDa,

Activity: Measured by its ability to bind recombinant human LDLR-EGF-AB domain using the Human PCSK9-/LDLR in vitro Binding Assay Kit (CircuLex Catalog # CY-8150).



Formulation: Supplied as solutions in 50 mM Tris pH 8.0, 150 mM NaCl and 10 % Glycerol.

Shipping: The product is shipped on dry ice. Upon receipt, store it immediately at -80 °C.

Stability & Storage: Store at -80 °C freezer and avoid repeated freeze-thaw cycles.

- Stable for 12 months at -80 °C.

References:

Fisher TS, et al., **2007**, *J Biol. Chem.* **282**(28):20502-12

Qian YW, et al., **2007**, *J Lipid Res.* **48**(7):1488-98