

Recombinant Human PCSK9 (D374Y) protein, His-tagged

Cat. No. PCSK9-2137H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human PCSK9 (Gln31-Gln692, D374Y) protein was fused to His-tag at C-terminus and expressed in human 293 cells (HEK293).
Species	Human
Source	HEK293
ProteinLength	Gln31-Gln692
Description	<p>Proprotein convertase subtilisin/kexin type 9 (PCSK9), is an enzyme which 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. 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. PCSK9 may also have a role in the differentiation of cortical neurons. Mutations in this gene have been associated with a rare form of autosomal dominant familial hypercholesterolemia (HCHOLA3). Especially, the D374Y mutation results in higher affinity of PCSK9 for LDLR.</p>
Predicted N Terminal	Gln31
Form	Lyophilized from 0.22 µm filtered solution in PBS, pH7.4, 10% trehalose.
Molecular Mass	Human PCSK9 (D374Y) has a calculated MW of 72.0 kDa. The reducing (R) protein

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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migrates as 17 kDa and 66 kDa in SDS-PAGE due to glycosylation and proteoly digestion. The D374Y mutation results in higher affinity of PCSK9 for LDLR.

Endotoxin Less than 1.0 EU per µg by the LAL method.

Purity >92% as determined by SDS-PAGE.

Storage For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower.
Please avoid repeated freeze-thaw cycles.
This product is stable after storage at:
-20 to -70 centigrade for 12 months in lyophilized state;
-70 centigrade for 3 months under sterile conditions after reconstitution.

Reconstitution It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.

GENE INFORMATION

Gene Name PCSK9

Official Symbol PCSK9

Synonyms FH3; PC9; FHCL3; NARC1; LDLCQ1; NARC-1; HCHOLA3

Gene ID 353175

mRNA Refseq NM_174936.4

Protein Refseq NP_777596.2

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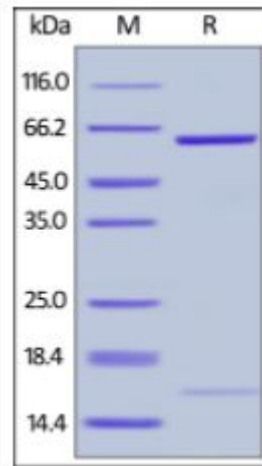
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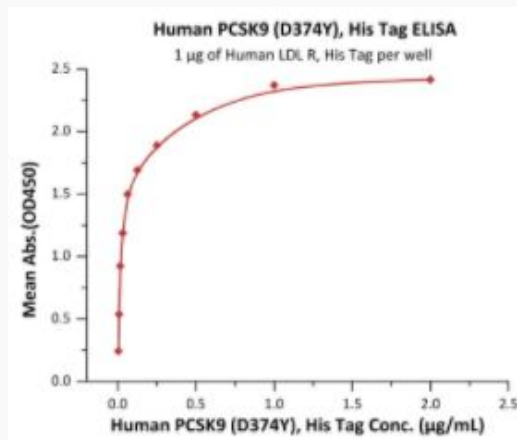
UniProt ID Q8NBP7

SDS-PAGE of PCSK9-2137H



Human PCSK9 (D374Y), His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 92%.

Bioactivity-ELISA of PCSK9-2137H



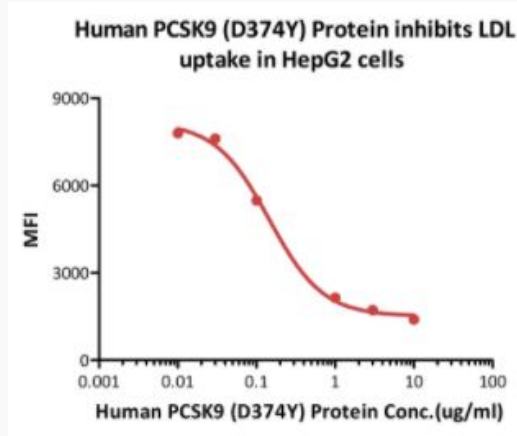
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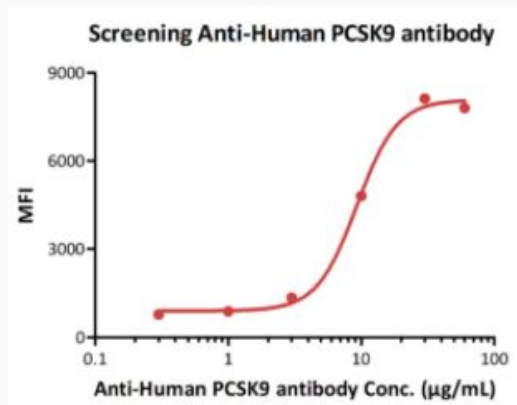
Immobilized Human LDL R, His Tag at 10 µg/mL (100 µL/well) can bind Human PCSK9 (D374Y), His Tag with a linear range of 0.004-0.063 µg/mL (QC tested).

Bioactivity-FACS



FACS analysis shows that Human PCSK9 (D374Y), His Tag inhibits LDL uptake in HepG2 cells. The EC50 for this effect is 0.0689-0.3049 µg/mL.

Bioactivity-FACS of PCSK9-2137H



FACS analysis shows that the effect of Human PCSK9 (D374Y), His Tag inhibiting


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LDL uptake in HepG2 cells was neutralized by Anti-Human PCSK9 antibody. The concentration of PCSK9 used is 5 µg/mL. The EC50 for Anti-Human PCSK9 antibody is 6.816-12.67 µg/mL.

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