



## Synonym

PCSK9,FH3,HCHOLA3,LDLCQ1,NARC1,PC9

## Source

Human PCSK9, Fc Tag(PC9-H5256) is expressed from human 293 cells (HEK293). It contains AA Gln 31 - Gln 692 (Accession # [Q8NBP7-1](#) ).

Predicted N-terminus: Gln 31

## Molecular Characterization

PCSK9(Gln 31 - Gln 692) Q8NBP7-1	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus. This protein undergoes autocatalytic cleavage to release the pro-peptide and mature chain. The pro-peptide and mature chain are associated through non-covalent interactions and with a calculated MW of 13.8 kDa and 83.7 kDa respectively. The protein migrates as 16 kDa and 100 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Endotoxin

Less than 1.0 EU per µg by the LAL method.

## Purity

>90% as determined by SDS-PAGE.

## Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

## Reconstitution

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

## Storage

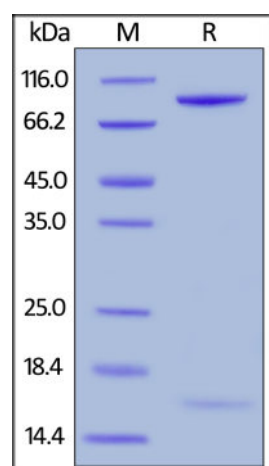
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## SDS-PAGE

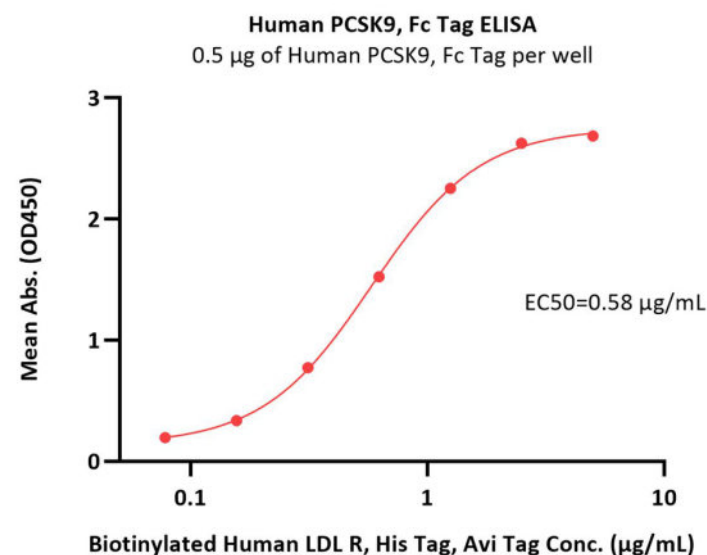
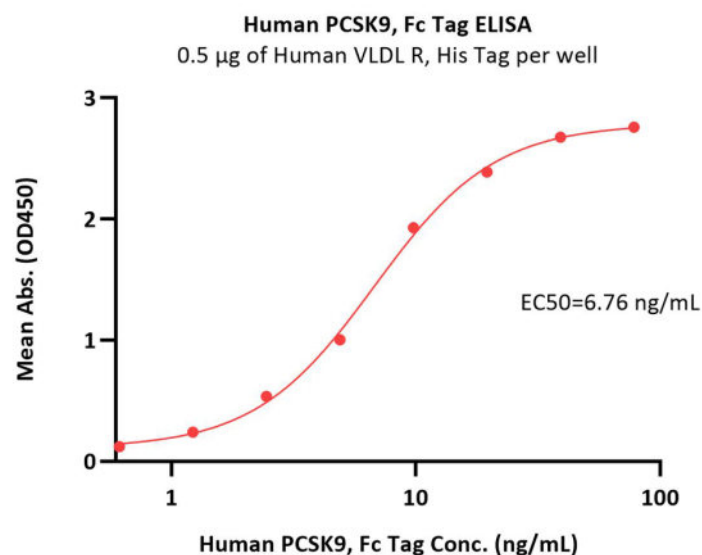


Human PCSK9, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

## Bioactivity-ELISA

Discounts, Gifts,  
and more!

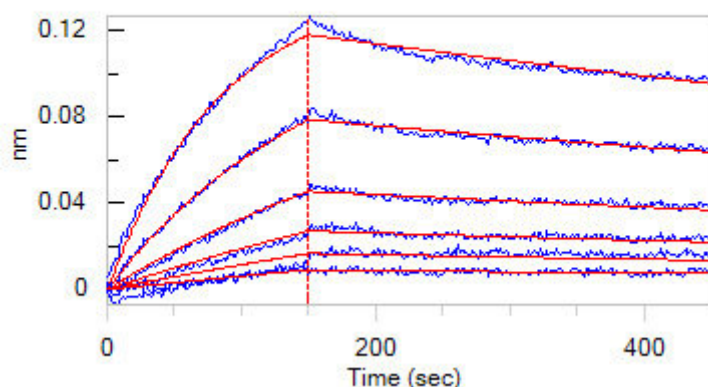




Immobilized Human VLDL R, His Tag (Cat. No. VLR-H5227) at 5 µg/mL (100 µL/well) can bind Human PCSK9, Fc Tag (Cat. No. PC9-H5256) with a linear range of 1-10 ng/mL (QC tested).

Immobilized Human PCSK9, Fc Tag (Cat. No. PC9-H5256) at 5 µg/mL (100 µL/well) can bind Biotinylated Human LDL R, His Tag, Avi Tag (Cat. No. LDR-H82E7) with a linear range of 0.04-0.625 µg/mL (Routinely tested).

## Bioactivity-BLI



Loaded Human PCSK9, Fc Tag (Cat. No. PC9-H5256) on Protein A Biosensor, can bind Human LDL R, His Tag (Cat. No. LDR-H5224) with an affinity constant of 12.7 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

## Background

Proprotein convertase subtilisin/kexin type 9 (PCSK9) is also known as NARC1 (neural apoptosis regulated convertase), is a newly identified subtilase belonging to the peptidase S8 subfamily. Mouse PCSK9 is synthesized as a soluble zymogen, and undergoes autocatalytic intramolecular processing in the endoplasmic reticulum, resulting in the cleavage of its propeptide that remains associated with the secreted active enzyme with a broad alkaline pH optimum. 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).

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.

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