

Synonym

PCSK9,FH3,HCHOLA3,LDLCQ1,NARC1,PC9

Source

Human PCSK9 Protein, His Tag(PC9-H52H7) is expressed from human 293 cells (HEK293). It contains AA Gln 31 -His 449 (Accession # [Q8NBP7-1](#)).

Predicted N-terminus: Gln 31 & Ser 153

Molecular Characterization

PCSK9(Gln 31 -His 449)
Q8NBP7-1 Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 13.8 kDa & 33.5 kDa. The protein migrates as 15 kDa and 33 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) 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.

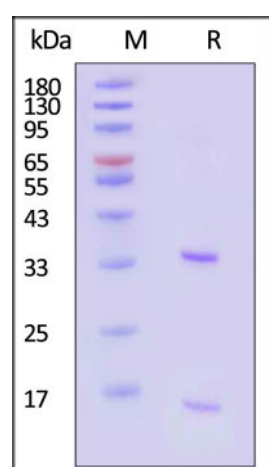
Storage

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 Protein, His Tag on SDS-PAGE under reducing (R) condition.

The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

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 (FH). 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 if you have any question on this product.