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Datasheet for ABIN3094448  
**PCSK9 Protein (AA 153-692) (His tag)**

### Overview

|                               |  |
|-------------------------------|--|
| Quantity:                     | 1 mg   |
| Target:                       | PCSK9  |
| Protein Characteristics:      | AA 153-692   |
| Origin:                       | Human  |
| Source:                       | Insect Cells   |
| Protein Type:                 | Recombinant  |
| Purification tag / Conjugate: | This PCSK9 protein is labelled with His tag.                         |
| Application:                  | Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys) |

### Product Details

Sequence: SIPWNLERIT PPRYRADEYQ PPDGGSLVEV YLLDTSIQSD HREIEGRVMV TDFENVPEED  
GTRFHRQASK CDSHGTHLAG VVSGRDAGVA KGASMRLRV LNCQKGTVS GTLIGLEFIR  
KSQLVQPVGP LVVLLPLAGG YSRVLNAACQ RLARAGVVLV TAAGNFRDDA CLYSPASAPE  
VITVGATNAQ DQPVTLGTLG TNFGRCVDLF APGEDIIGAS SDCSTCFVSQ SGTSQAAAHV  
AGIAAMMLSA EPELTLAELR QRLIHFSKAD VINEAWFPED QRVLTPNLVA ALPPSTHGAG  
WQLFCRTVWS AHSGPTRMAT AVARCAPDEE LLSCSSFERS GKRRGERMEA QGGKLVCRAH  
NAFGGEGVYA IARCCLLPQA NCSVHTAPPA EASMGTRVHC HQQGHVLTGC SSHWEVEDLG  
THKPPVLRPR GQPNQCVGHR EASIHASCCH APGLECKVKE HGIPAPQEQV TVACEEGWTL  
TGCSALPGTS HVLGAYAVDN TCVVRSRDVS TTGSTSEGAV TAVAIICRSR HLAQASQELQ

**Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

## Product Details

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### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human PCSK9 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

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### Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

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### Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

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### Sterility:

0.22 µm filtered

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### Endotoxin Level:

Protein is endotoxin free.

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### Grade:

Crystallography grade

## Target Details

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Target: PCSK9

Alternative Name: PCSK9 ([PCSK9 Products](#))

Background: Crucial player in the regulation of plasma cholesterol homeostasis. Binds to 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 in intracellular acidic compartments (PubMed:18039658). Acts via a non-proteolytic mechanism to enhance the degradation of the hepatic LDLR through a clathrin LDLRAP1/ARH-mediated pathway. May prevent the recycling of LDLR from endosomes to the cell surface or direct it to lysosomes for degradation. Can induce ubiquitination of LDLR leading to its subsequent degradation (PubMed:18799458, PubMed:17461796, PubMed:18197702, PubMed:22074827). Inhibits intracellular degradation of APOB via the autophagosome/lysosome pathway in a LDLR-independent manner. Involved in the disposal of non-acetylated intermediates of BACE1 in the early secretory pathway (PubMed:18660751). Inhibits epithelial Na(+) channel (ENaC)-mediated Na(+) absorption by reducing ENaC surface expression primarily by increasing its proteasomal degradation. Regulates neuronal apoptosis via modulation of LRP8/APOER2 levels and related anti-apoptotic signaling pathways. {ECO:0000269|PubMed:17461796, ECO:0000269|PubMed:18039658, ECO:0000269|PubMed:18197702, ECO:0000269|PubMed:18660751, ECO:0000269|PubMed:18799458, ECO:0000269|PubMed:22074827, ECO:0000269|PubMed:22493497, ECO:0000269|PubMed:22580899}.

Molecular Weight: 58.2 kDa Including tag.

UniProt: [Q8NBP7](#)

## Application Details

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Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

## Handling

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|                  |  |
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| Format:          | Liquid   |
| Buffer:          | 100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer. |
| Handling Advice: | Avoid repeated freeze-thaw cycles.   |
| Storage:         | -80 °C   |
| Storage Comment: | Store at -80°C.  |
| Expiry Date:     | Unlimited (if stored properly)   |