

Human IL-8 / CXCL8 Protein, premium grade

Catalog # IL8-H5217



Synonym

CXCL8, GCP1, IL8, LECT, LUCT, LYNAP, MDNCF, MONAP, NAF, NAP-1

Source

Human IL-8 Protein, premium grade (IL8-H5217) is expressed from human 293 cells (HEK293). It contains AA Ser 28 - Ser 99 (Accession # [P10145-1](#)).

Predicted N-terminus: Ser 28

It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

Molecular Characterization

IL-8(Ser 28 - Ser 99)
P10145-1

This protein carries no "tag".

The protein has a calculated MW of 8.4 kDa. The protein migrates as 9 kDa $\pm$ 3 kDa under reducing (R) condition, and 11 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.01 EU per μ g by the LAL method / rFC method.

Host Cell Protein

<0.5 ng/ μ g of protein tested by ELISA.

Host Cell DNA

<0.02 ng/ μ g of protein tested by qPCR.

Sterility

Negative

Mycoplasma

Negative

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-HPLC.

Formulation

Lyophilized from 0.22 μ m 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.

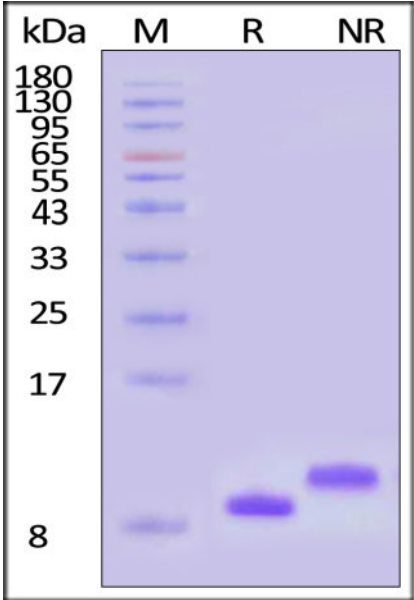
This product is stable after storage at:

- -20°C to -70°C for 24 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

ACRO Quality Management System

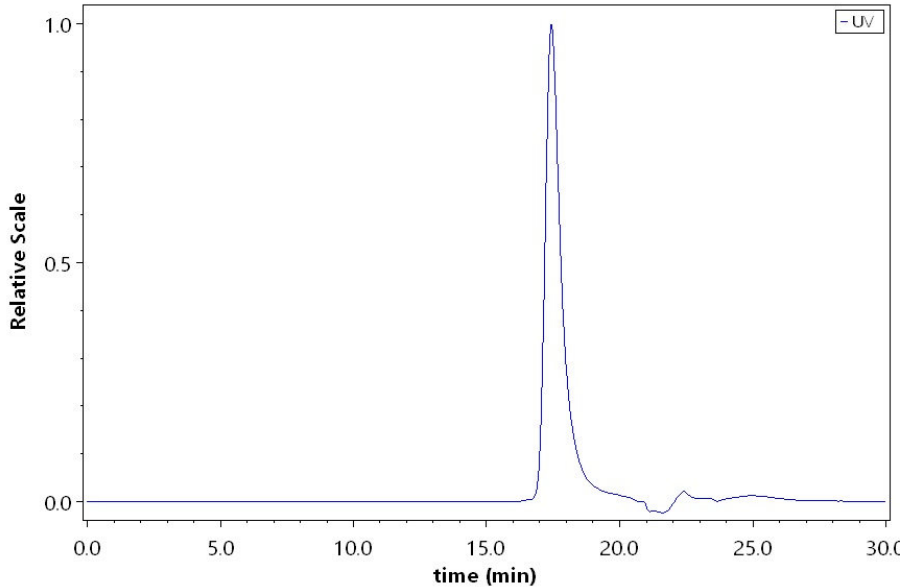
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



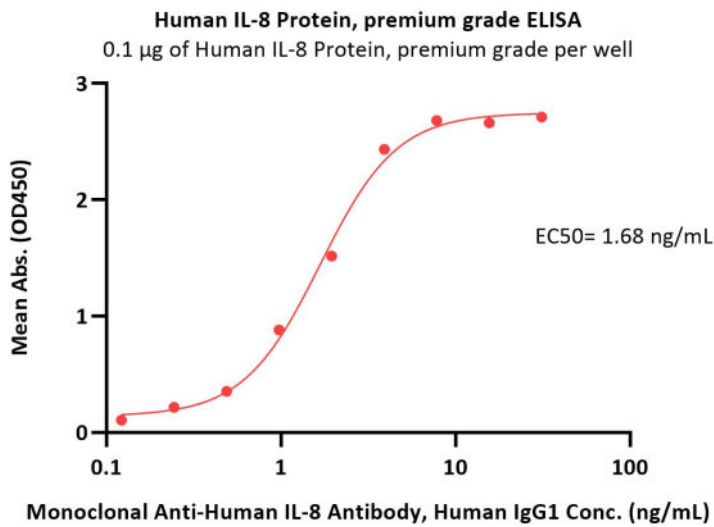
Human IL-8 Protein, premium grade on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-HPLC



The purity of Human IL-8 Protein, premium grade (Cat. No. IL8-H5217) was greater than 90% as determined by SEC-HPLC.

Bioactivity-ELISA



Immobilized Human IL-8 Protein, premium grade (Cat. No. IL8-H5217) at 1 µg/mL (100 µL/well) can bind Monoclonal Anti-Human IL-8 Antibody, Human IgG1 with a linear range of 0.1-4 ng/mL (QC tested).

Background

Interleukin 8 (IL8 or chemokine (C-X-C motif) ligand 8, CXCL8) is a chemokine produced by macrophages and other cell types such as epithelial cells, airway smooth muscle cells and endothelial cells. There are many receptors on the surface membrane capable of binding IL-8, the most frequently studied types are the G protein-coupled serpentine receptors CXCR1 and CXCR2. Expression and affinity for IL-8 differs between the two receptors (CXCR1 > CXCR2). IL-8(6-77) has a 5-10-fold higher activity on neutrophil activation, IL-8(5-77) has increased activity on neutrophil activation and IL-8(7-77) has a higher affinity to receptors CXCR1 and CXCR2 as compared to IL-8(1-77), respectively.



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