

Human IL-9 Protein, premium grade

Catalog # IL9-H5214



Synonyms

Interleukin-9, IL-9, Cytokine P40

Source

Human IL-9 Protein, premium grade (IL9-H5214) is expressed from human 293 cells (HEK293). It contains AA Gln 19 - Ile 144 (Accession # [P15248-1](#)).

Predicted N-terminus: Gln 19

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-9(Gln 19 - Ile 144)
P15248-1

This protein carries no "tag".

The protein has a calculated MW of 14.1 kDa. The protein migrates as 30 kDa $\pm$ 3 kDa under reducing (R) condition, and 30 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

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

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.

Shipping and Storage

This product is shipped at ambient temperature.

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

Please avoid repeated freeze-thaw cycles.

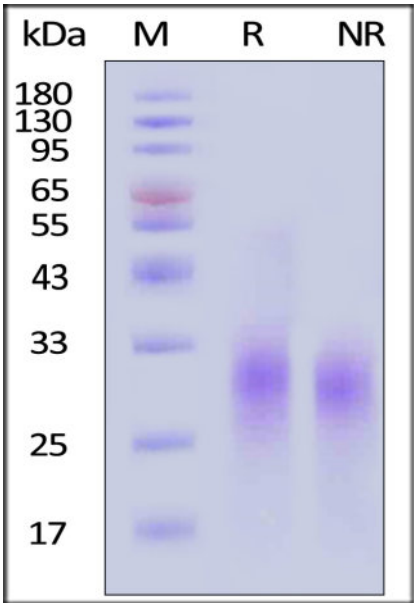
This product is stable after storage at:

- -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

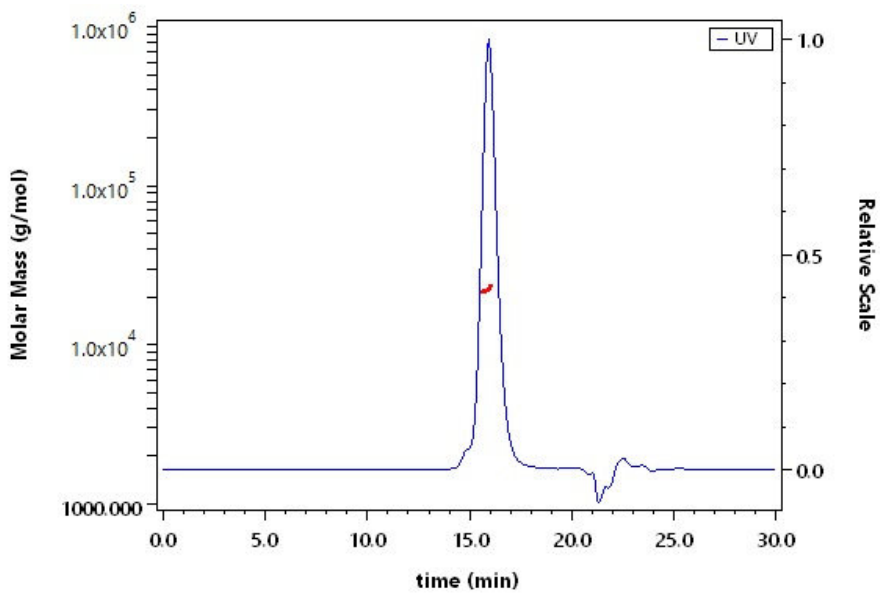
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



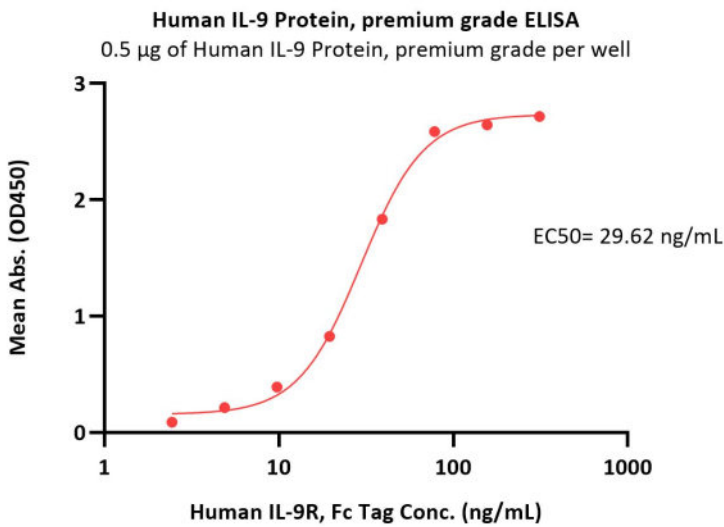
Human IL-9 Protein, premium grade on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



The purity of Human IL-9 Protein, premium grade (Cat. No. IL9-H5214) is more than 95% and the molecular weight of this protein is around 18-25 kDa verified by SEC-MALS.

Bioactivity-ELISA



Immobilized Human IL-9 Protein, premium grade (Cat. No. IL9-H5214) at 5 µg/mL (100 µL/well) can bind Human IL-9R, Fc Tag (Cat. No. ILR-H5251) with a linear range of 2-78 ng/mL (QC tested).

Background

Interleukin-9 (IL-9) is expressed primarily by activated T cells. The growth factor and anti apoptotic activities of IL-9 on multiple transformed cells suggest a potential role for the cytokine in tumourigenesis. IL-9 has also been proposed as a candidate gene for asthma. IL-9 is a Th2-derived cyto kine that has been reported to regulate T and B cell function. IL-9 was first isolated as a factor capable of sustaining the long-termgrowth of murine T cell clones, but has since been demon strated to have in vitro activities on mast cells, erythroid pro genitors, and B cell Ig expression.



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