

# Mouse IL-31 Protein, His Tag (HPLC verified)

Catalog # IL1-M5244



## Synonyms

IL-31, IL31, Interleukin-31

## Source

Mouse IL-31 Protein, His Tag (IL1-M5244) is expressed from human 293 cells (HEK293). It contains AA Thr 24 - Cys 163 (Accession # [Q6EAL8](#)).

Predicted N-terminus: His

## Molecular Characterization

Poly-his

IL-31(Thr 24 - Cys 163)  
Q6EAL8

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

The protein has a calculated MW of 17.5 kDa. The protein migrates as 20 kDa and 23-33 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 / rFC method.

## Purity

>90% as determined by SDS-PAGE.

>95% as determined by SEC-HPLC.

## 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.**

## 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.**

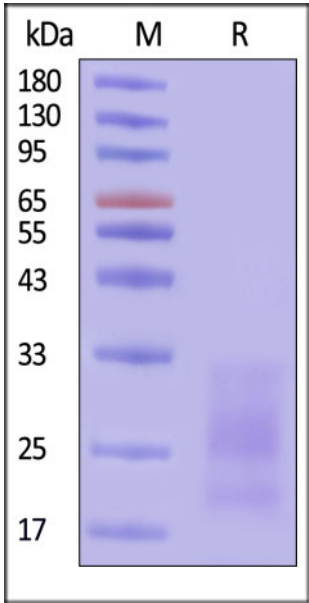
This product is stable after storage at:

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

## ACRO Quality Management System

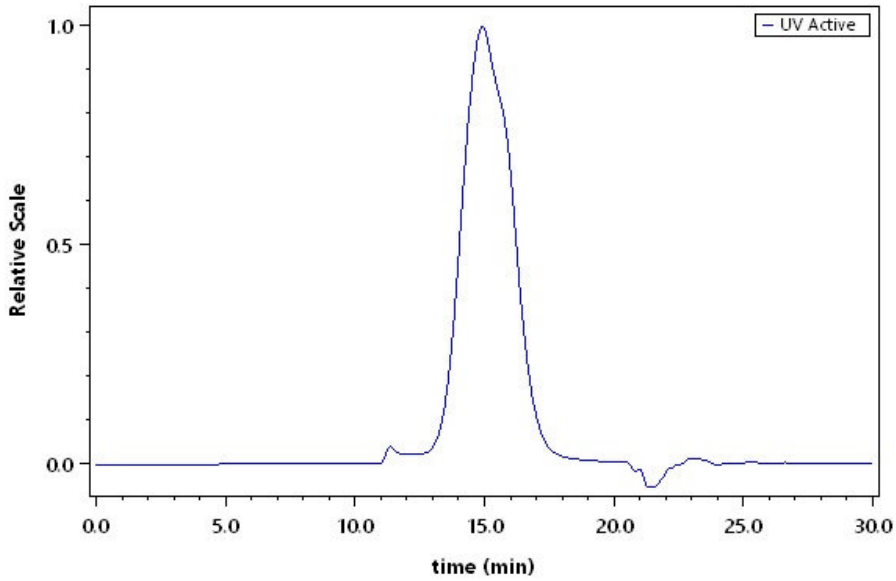
- [QMS\(ISO, GMP\)](#).
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



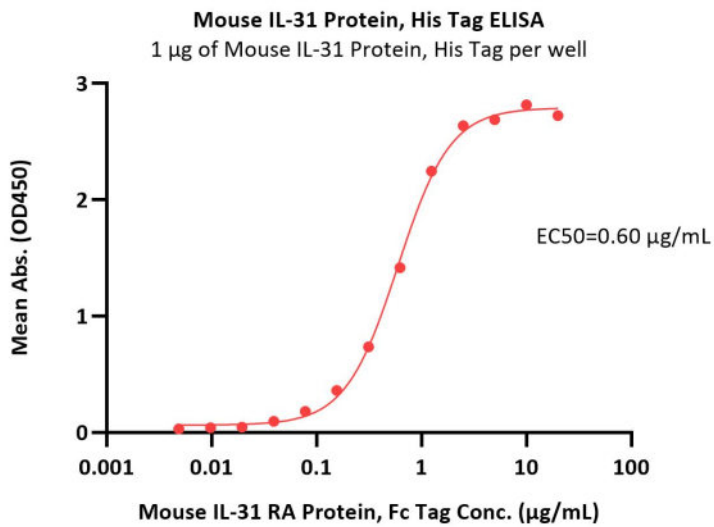
Mouse IL-31 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-HPLC



The purity of Mouse IL-31 Protein, His Tag (Cat. No. IL1-M5244) was greater than 95% as determined by SEC-HPLC.

Bioactivity-ELISA



Immobilized Mouse IL-31 Protein, His Tag (Cat. No. IL1-M5244) at 10 µg/mL (100 µL/well) can bind Mouse IL-31 RA Protein, Fc Tag (Cat. No. ILA-M5254) with a linear range of 0.005-1.25 µg/mL (QC tested).

Background

IL-31 is an inflammatory cytokine that helps trigger cell-mediated immunity against pathogens. Activates STAT3 and possibly STAT1 and STAT5 through the IL31 heterodimeric receptor composed of IL31RA and OSMR. It has also been identified as a major player in a number of chronic inflammatory diseases, including atopic dermatitis. May function in skin immunity. IL-31 is produced by a variety of cells, namely type 2 helper (TH2) T-cells. IL-31 sends signals through a receptor complex made of IL-31RA and oncostatin M receptor β (OSMRβ) expressed in immune and epithelial cells. These signals activate three pathways: ERK1/2 MAP kinase, PI3K/AKT, and JAK1/2 signaling pathways.



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