

# Biotinylated Mouse IL-13 Protein, His,Avitag™ (MALS verified)

Catalog # IL3-M82Q3



BIOSYSTEMS  
**Acro**

## Synonym

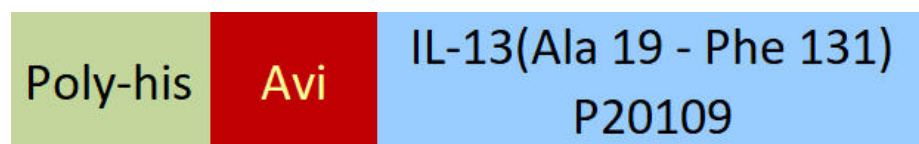
IL13, ALRH, BHR1, MGC116786, MGC116788, MGC116789, P600, Interleukin-13

## Source

Biotinylated Mouse IL-13 Protein, His,Avitag (IL3-M82Q3) is expressed from human 293 cells (HEK293). It contains AA Ala 19 - Phe 131 (Accession # [P20109](#)).

Predicted N-terminus: His

## Molecular Characterization



This protein carries a polyhistidine tag at the N-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 15.9 kDa. The protein migrates as 12-17 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Labeling

**Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.**

## Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

## Purity

>90% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

## 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.**

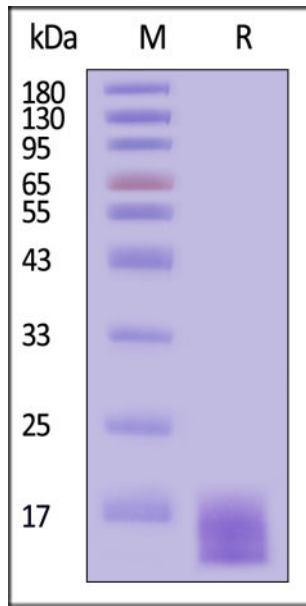
This product is stable after storage at:

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

## ACRO Quality Management System

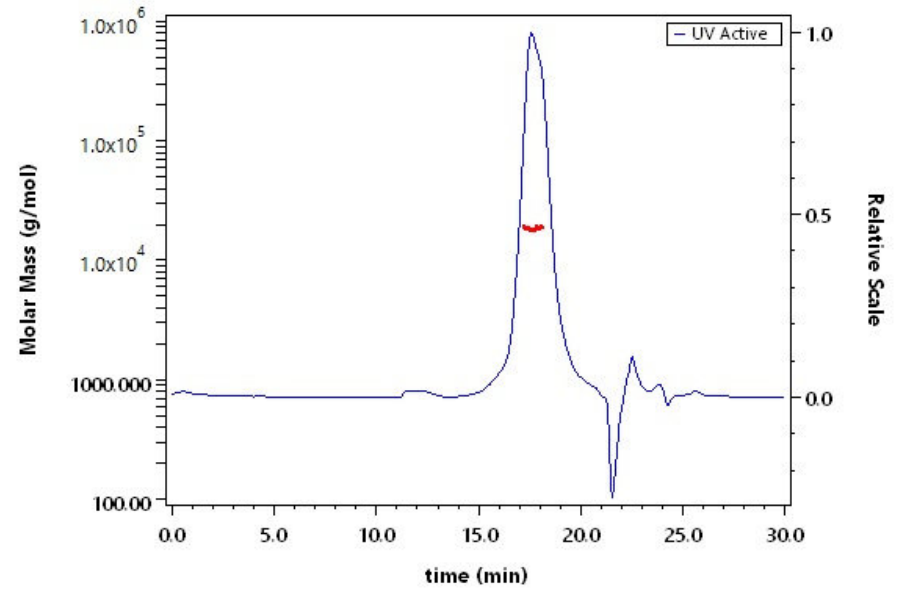
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

## SDS-PAGE



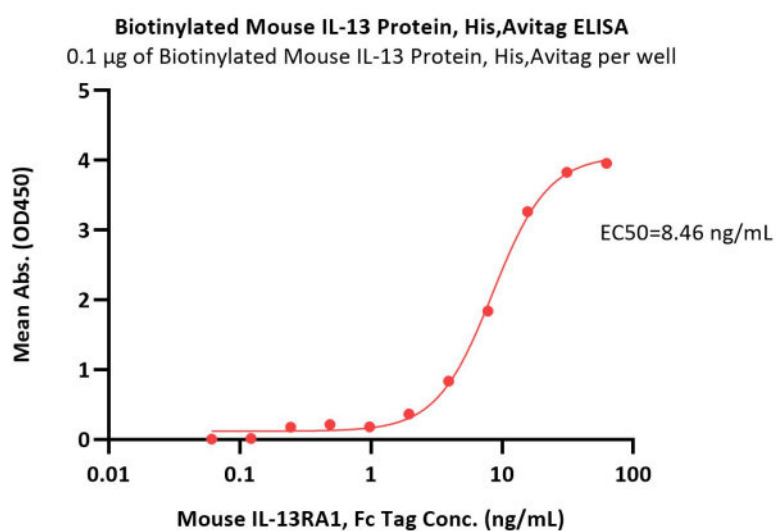
Biotinylated Mouse IL-13 Protein, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

## SEC-MALS



The purity of Biotinylated Mouse IL-13 Protein, His,Avitag (Cat. No. IL3-M82Q3) is more than 95% and the molecular weight of this protein is around 15-22 kDa verified by SEC-MALS.

## Bioactivity-ELISA



Immobilized Biotinylated Mouse IL-13 Protein, His,Avitag (Cat. No. IL3-M82Q3) at 1  $\mu\text{g/mL}$  (100  $\mu\text{L/well}$ ) on streptavidin (Cat. No. STN-N5116) pre-coated (0.5  $\mu\text{g/well}$ ) plate can bind Mouse IL-13RA1, Fc Tag (Cat. No. IL1-M5258) with a linear range of 0.06-16 ng/mL (QC tested).

## Background

Interleukin 13 (IL13) is also known as ALRH, BHR1 and P600, is a single-chain glycosylated polypeptide, and is a cytokine critical in regulating inflammatory and immune responses. IL13 is secreted by many cell types, but especially by T helper type 2 (Th2) cells. IL-13 induces its effects through a multi-subunit receptor that includes the alpha chain of the IL-4 receptor (IL-4R $\alpha$ ) and at least one of two known IL-13-specific binding chains. The functions of IL-13 overlap considerably with those of IL-4, especially with regard to changes induced on hematopoietic cells, but these effects are probably less important given the more potent role of IL-4. IL-13 induces matrix metalloproteinases (MMPs) as part of a mechanism that protects against excessive allergic inflammation that predisposes to asphyxiation. IL-13 induces many features of allergic lung disease, including airway hyperresponsiveness, goblet cell metaplasia and mucus hypersecretion, which all contribute to airway obstruction.

Discounts, Gifts,  
and more!



[www.acrobiosystems.com](http://www.acrobiosystems.com)

