# Biotinylated Human IL-6 Protein, Avitag™, His Tag (MALS verified)

Catalog # IL6-H82Q9



## **Synonym**

IL6,Interleukin-6,BSF2,HSF,IFNB2

### **Source**

Biotinylated Human IL-6, Avitag, His Tag(IL6-H82Q9) is expressed from human 293 cells (HEK293). It contains AA Val 30 - Met 212 (Accession # P05231-1). Predicted N-terminus: Gly

## **Molecular Characterization**



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

The protein has a calculated MW of 24.4 kDa. The protein migrates as 28-30 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Labeling

Biotinylation of this product is performed using Avitag<sup>TM</sup> 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.

## Endotoxin

Less than 1.0 EU per µg by the LAL method.

## **Purity**

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  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

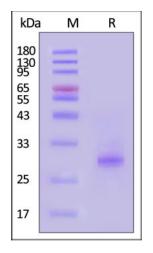
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

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

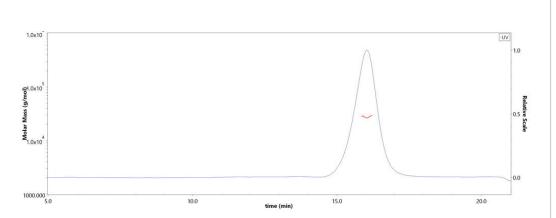
# **SDS-PAGE**



Biotinylated Human IL-6, Avitag, 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 <u>Star Ribbon Pre-stained Protein Marker</u>).

# **Bioactivity-ELISA**

# **SEC-MALS**



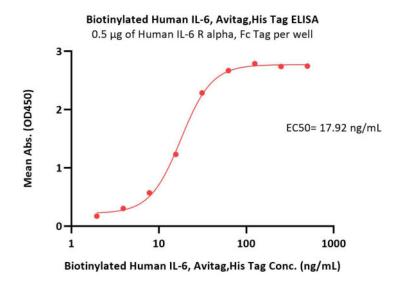
The purity of Biotinylated Human IL-6, Avitag, His Tag (Cat. No. IL6-H82Q9) is more than 90% and the molecular weight of this protein is around 24-34 kDa verified by SEC-MALS.

Report

# Biotinylated Human IL-6 Protein, Avitag™, His Tag (MALS verified)







Immobilized Human IL-6 R alpha, Fc Tag (Cat. No. ILR-H5259) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Human IL-6, Avitag,His Tag (Cat. No. IL6-H82Q9) with a linear range of 2-31 ng/mL (QC tested).

# Background

Interleukin 6 (IL-6) is also known as HGF, BSF2,HSF, IFNB2 and IL-6, originally identified as a B cell differentiation factor, is a multifunctional cytokine that regulates immune responses, hematopoiesis, acute phase responses, and inflammatory reactions. It is secreted by T cells, macrophages, monocytes, fibroblasts, endothelial cells, et.al. to stimulate immune response to trauma, especially burns or other tissue damage leading to inflammation. Interleukin 6 has been shown to interact with interleukin-6 receptor and glycoprotein. IL-6 is relevant to many disease processes such as diabetes, atherosclerosis, depression, Alzheimer's Disease, systemic, lupus erythematosus, prostate cancer and rheumatoid arthritis. Advanced/metastatic cancer patients have higher levels of IL-6 in their blood. Hence there is an interest in developing anti-IL-6 agents as therapy against many of these diseases.

# **Clinical and Translational Updates**

