Biotinylated Mouse IL-31 Protein, His,Avitag™ (MALS verified)

Catalog # IL1-M82Q9

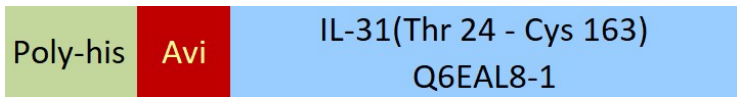
Synonym

IL-31,IL31,Interleukin-31

Source

Biotinylated Mouse IL-31, His,Avitag(IL1-M82Q9) is expressed from human 293 cells (HEK293). It contains AA Thr 24 - Cys 163 (Accession # Q6EAL8-1). 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 19.2 kDa. The protein migrates as 20-35 kDa 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.

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 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

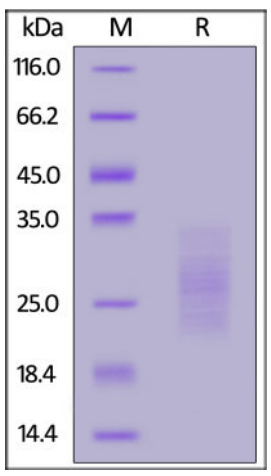
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

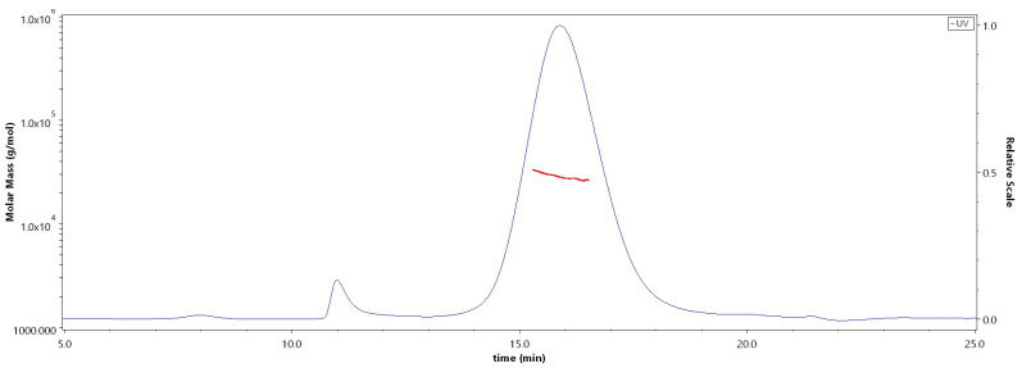
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Mouse IL-31, 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%.

SEC-MALS



The purity of Biotinylated Mouse IL-31, His,Avitag (Cat. No. IL1-M82Q9) is more than 90% and the molecular weight of this protein is around 22-34 kDa verified by SEC-MALS.
Report

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.

Clinical and Translational Updates