

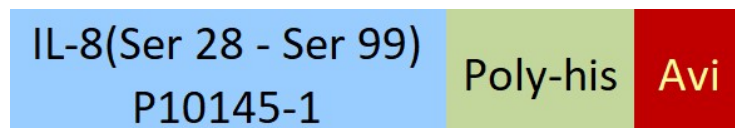
Synonym

CXCL8,GCP1,IL8,LECT,LUCT,LYNAP,MDNCF,MONAP,NAF,NAP-1

Source

Biotinylated Human IL-8, His,Avitag (IL8-H82H3) is expressed from human 293 cells (HEK293). It contains AA Ser 28 - Ser 99 (Accession # [P10145-1](#)).

Predicted N-terminus: Ser 28

Molecular Characterization

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

The protein has a calculated MW of 12.0 kDa. The protein migrates as 14 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Biotinylation

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

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.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

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.

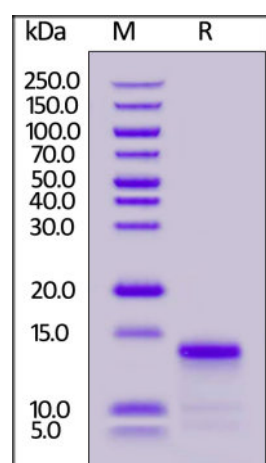
Storage

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

Please avoid repeated freeze-thaw cycles.

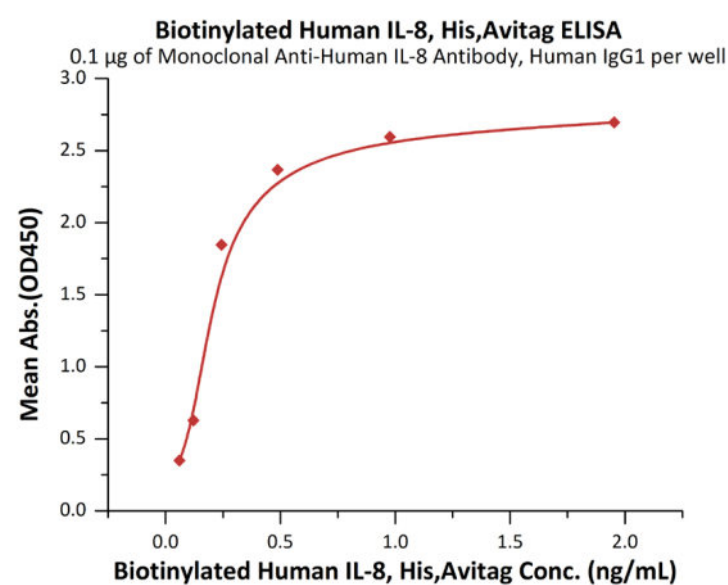
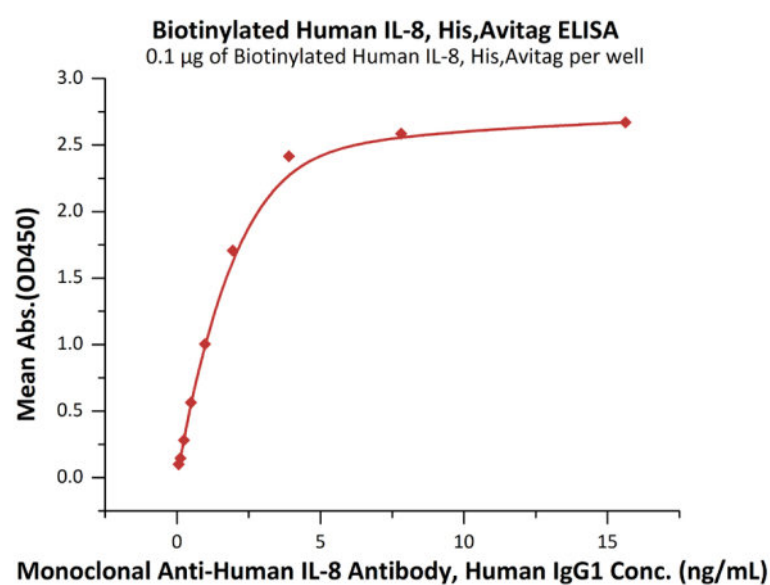
This product is stable after storage at:

- -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-8, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Immobilized Biotinylated Human IL-8, His,Avitag (Cat. No. [IL8-H82H3](#)) at 1 µg/mL (100 µL/well) on streptavidin precoated (0.5 µg/well) plate can bind Monoclonal Anti-Human IL-8 Antibody, Human IgG1 with a linear range of 0.06-2 ng/mL (QC tested).

Immobilized Monoclonal Anti-Human IL-8 Antibody, Human IgG1 at 1 µg/mL (100 µL/well) can bind Biotinylated Human IL-8, His,Avitag (Cat. No. [IL8-H82H3](#)) with a linear range of 0.06-0.2 ng/mL (Routinely tested).

Background

Interleukin 8 (IL8 or chemokine (C-X-C motif) ligand 8, CXCL8) is a chemokine produced by macrophages and other cell types such as epithelial cells, airway smooth muscle cells and endothelial cells. There are many receptors on the surface membrane capable of binding IL-8, the most frequently studied types are the G protein-coupled serpentine receptors CXCR1 and CXCR2. Expression and affinity for IL-8 differs between the two receptors (CXCR1 > CXCR2). IL-8(6-77) has a 5-10-fold higher activity on neutrophil activation, IL-8(5-77) has increased activity on neutrophil activation and IL-8(7-77) has a higher affinity to receptors CXCR1 and CXCR2 as compared to IL-8(1-77), respectively.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.