Biotinylated Human IL-22 Protein, His,Avitag™

Catalog # IL2-H8247

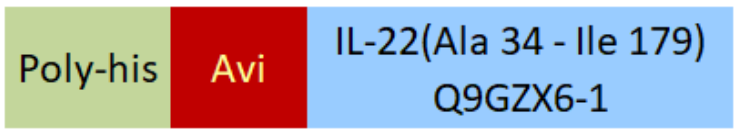
Synonym

IL-22,IL-TIF,ZCYTO18

Source

Biotinylated Human IL-22, His,Avitag(IL2-H8247) is expressed from human 293 cells (HEK293). It contains AA Ala 34 - Ile 179 (Accession # Q9GZX6-1). 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 20.3 kDa. The protein migrates as 25-35 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.

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

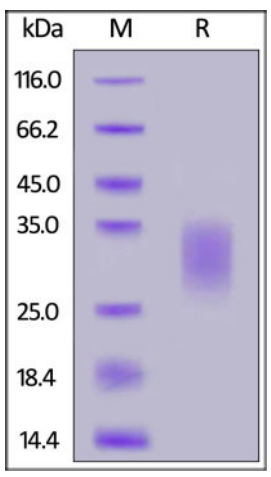
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

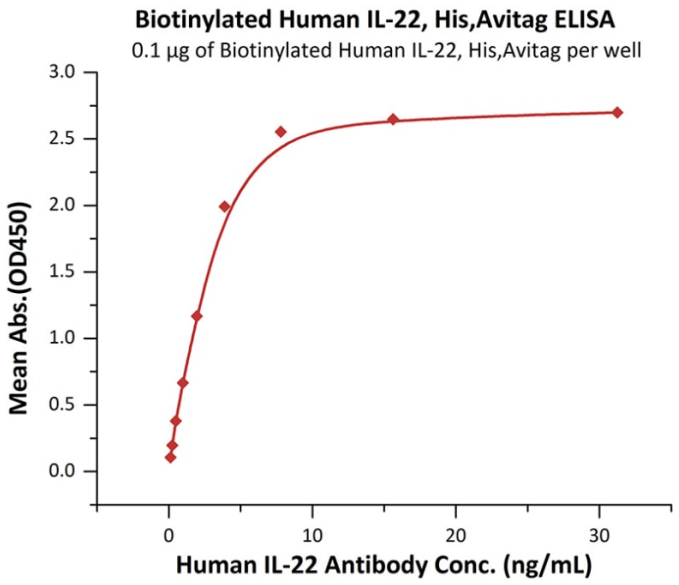
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

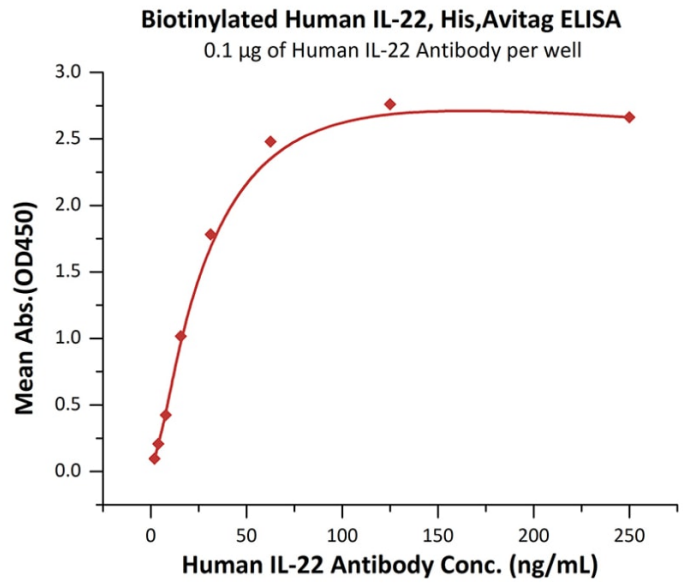


Biotinylated Human IL-22, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

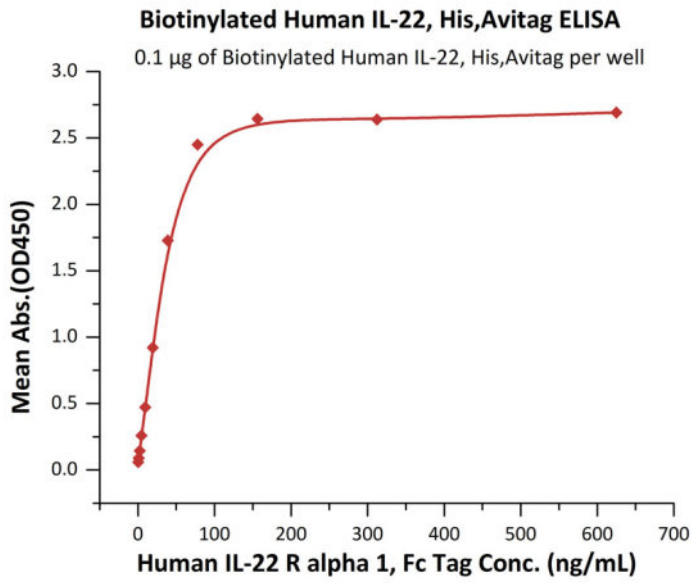
Bioactivity-ELISA



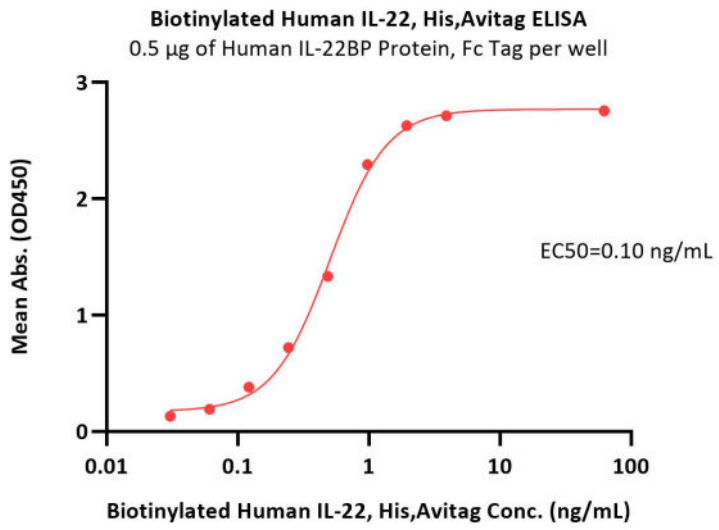
Immobilized Biotinylated Human IL-22, His,Avitag (Cat. No. IL2-H8247) at 1 μg/mL (100 μL/well)on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate. can bind Human IL-22 Antibody with a linear range of 0.1-4 ng/mL (QC tested).



Immobilized Human IL-22 Antibody at 1 μg/mL (100 μL/well) can bind Biotinylated Human IL-22, His,Avitag (Cat. No. IL2-H8247) with a linear range of 1-31 ng/mL (Routinely tested).



Immobilized Biotinylated Human IL-22, His,Avitag (Cat. No. IL2-H8247) at 1 μg/mL (100 μL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate can bind Human IL-22 R alpha 1, Fc Tag (Cat. No. IL1-H5258) with a linear range of 0.6-78 ng/mL (Routinely tested).



Immobilized Human IL-22BP Protein, Fc Tag (Cat. No. ILP-H5254) at 5 μg/mL (100 μL/well) can bind Biotinylated Human IL-22, His,Avitag (Cat. No. IL2-H8247) with a linear range of 0.03-1 ng/mL (Routinely tested).

Background

Interleukin-22 (IL22) is also known as cytokine Zcyto18, IL-10-related T-cell-derived-inducible factor (IL-TIF), which is belongs to the IL-10 family or IL-10 superfamily (including IL-19, IL-20, IL-24, and IL-26), a class of potent mediators of cellular inflammatory responses. IL-22 is produced by activated DC and T cells and initiates innate immune responses against bacterial pathogens especially in epithelial cells such as respiratory and gut epithelial cells. IL-22 biological activity is initiated by binding to a cell-surface complex composed of IL-22R1 and IL-10R2 receptor chains and further regulated by interactions with a soluble binding protein IL-22BP. IL-22 also promotes hepatocyte survival in the liver and epithelial cells in the lung and gut similar to IL-10.

Clinical and Translational Updates

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