

Rat IL-22 Protein, His Tag (MALs & SPR verified)

Catalog # IL2-R52H6



BIOSYSTEMS
Acro

Synonym

IL-22, IL-TIF, ZCYTO18

Source

Rat IL-22 Protein, His Tag (IL2-R52H6) is expressed from human 293 cells (HEK293). It contains AA Leu 34 - Val 179 (Accession # [G3V6X6](#)).

Predicted N-terminus: Leu 34

Molecular Characterization

IL-22(Leu 34 - Val 179) G3V6X6	Poly-his
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This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 18.5 kDa. The protein migrates as 27-35 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Purity

>95% 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.

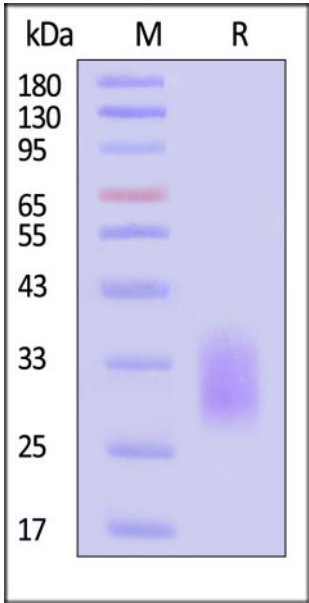
This product is stable after storage at:

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

ACRO Quality Management System

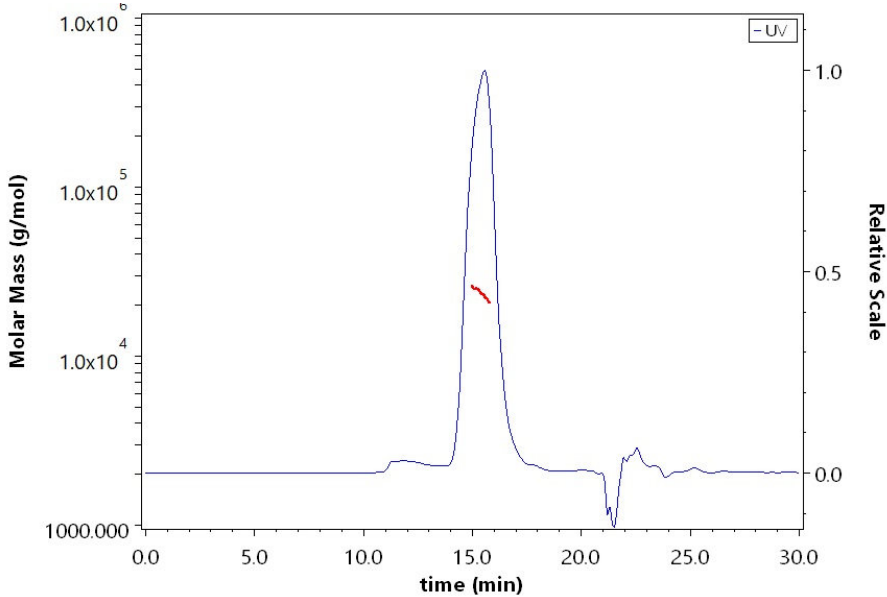
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



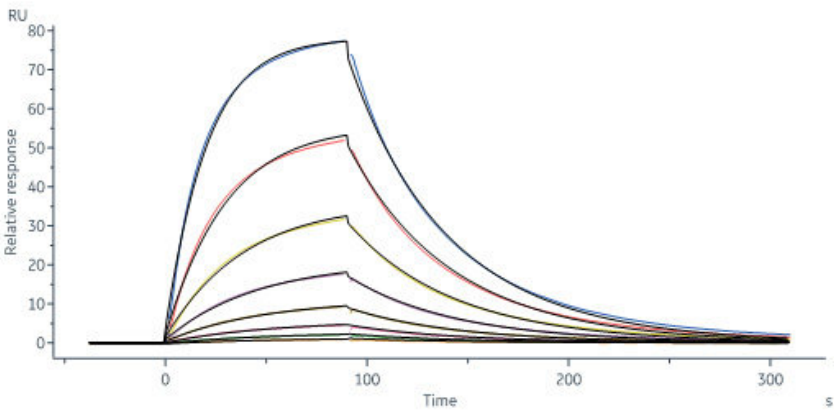
Rat IL-22 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



The purity of Rat IL-22 Protein, His Tag (Cat. No. IL2-R52H6) is more than 90% and the molecular weight of this protein is around 20-30 kDa verified by SEC-MALS.

Bioactivity-SPR



Mouse IL-22 R alpha 1 Protein, His Tag (Cat. No. IL1-M52H8) immobilized on CM5 Chip can bind Rat IL-22 Protein, His Tag (Cat. No. IL2-R52H6) with an affinity constant of 161 nM as determined in a SPR assay (Biacore 8K) (QC 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.



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