Synonym

IL-11,Interleukin-11,AGIF,Oprelvekin,IL11

Source

Human IL-11, Fc Tag(IL1-H5269) is expressed from human 293 cells (HEK293). It contains AA Pro 22 - Leu 199 (Accession # P20809-1).
Predicted N-terminus: Pro

Molecular Characterization

Fc(Pro 100 - Lys 330) P01857	IL-11(Pro 22 - Leu 199) P20809-1

This protein carries a human IgG1 Fc tag at the N-terminus.

The protein has a calculated MW of 45.6 kDa. The protein migrates as 47-55 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM NaCl, pH7.5 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

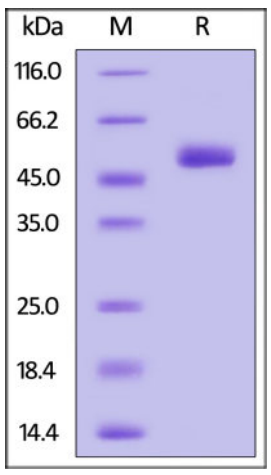
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

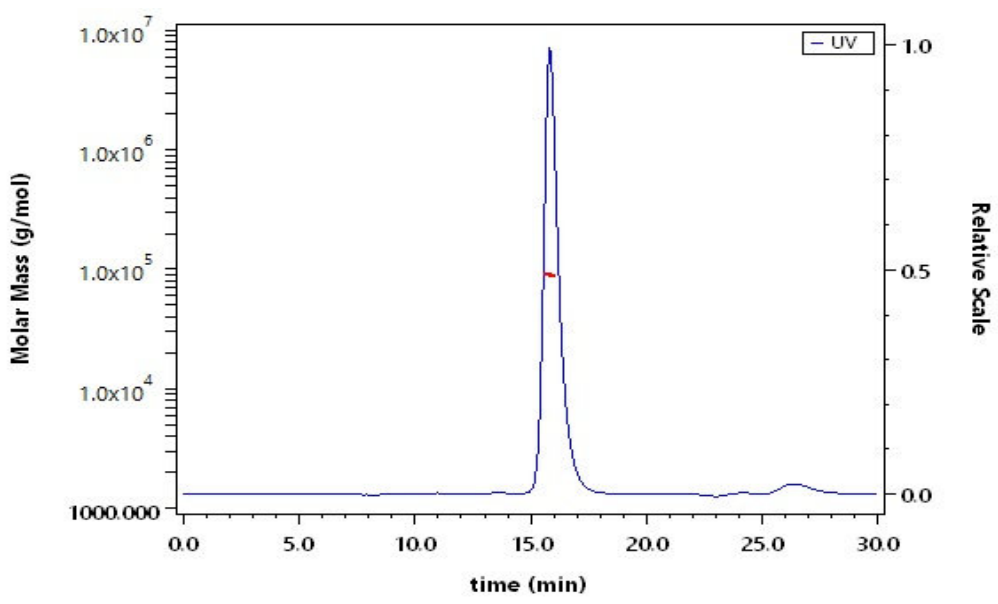
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



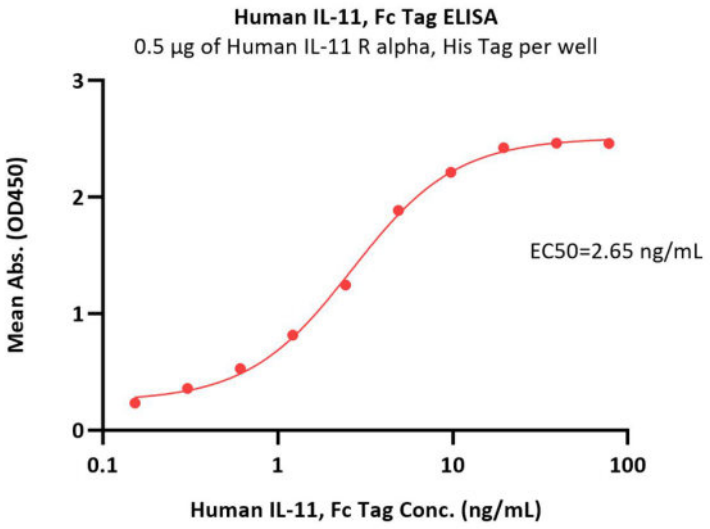
Human IL-11, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS

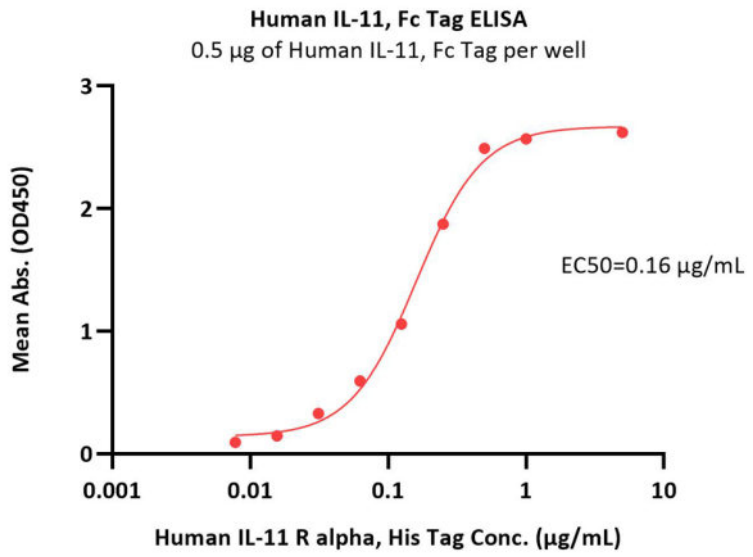


The purity of Human IL-11, Fc Tag (Cat. No. IL1-H5269) is more than 95% and the molecular weight of this protein is around 80-105 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Human IL-11 R alpha, His Tag (Cat. No. ILR-H52H5) at 5 μg/mL (100 μL/well) can bind Human IL-11, Fc Tag (Cat. No. IL1-H5269) with a linear range of 0.2-10 ng/mL (QC tested).



Immobilized Human IL-11, Fc Tag (Cat. No. IL1-H5269) at 5 μg/mL (100 μL/well) can bind Human IL-11 R alpha, His Tag (Cat. No. ILR-H52H5) with a linear range of 0.008-0.5 μg/mL (Routinely tested).

Background

Interleukin-11 (IL-11) is a pleiotropic cytokine that stimulates megakaryocytopoiesis, resulting in increased production of platelets, as well as activating osteoclasts, inhibiting epithelial cell proliferation and apoptosis, and inhibiting macrophage mediator production. These functions may be particularly important in mediating the hematopoietic, osseous and mucosal protective effects of IL-11. The cytokine also possesses anti-inflammatory activity, and has been proposed as a therapeutic agent in the treatment of chronic inflammatory diseases, such as Crohn's disease and rheumatoid arthritis. Although IL-11 was initially believed to be restricted to mammals, subsequent studies demonstrated it to be expressed in fish. Despite close similarity in gene structure and conservation of key amino acids between fish and mammalian IL-11, they share relatively low overall amino acid identity and may not necessarily be functionally analogous.