Human IL-6 R alpha & IL-6 Protein, His Tag (HPLC verified)

Catalog # IL6-H52H4

Synonym

IL-6 R alpha & IL-6

Source

Human IL-6 R alpha & IL-6 Protein, His Tag (IL6-H52H4) is expressed from human 293 cells (HEK293). It contains AA Leu 20 - Pro 365 & Val 30 - Met 212 (Accession # P08887-1 & P05231-1).

Predicted N-terminus: Leu 20 & Val 30

Molecular Characterization

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 65.0 kDa & 20.8 kDa. The protein migrates as 70-95 kDa when calibrated against Star Ribbon Pre-stained Protein Marker 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.

>90% as determined by SEC-HPLC.

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.

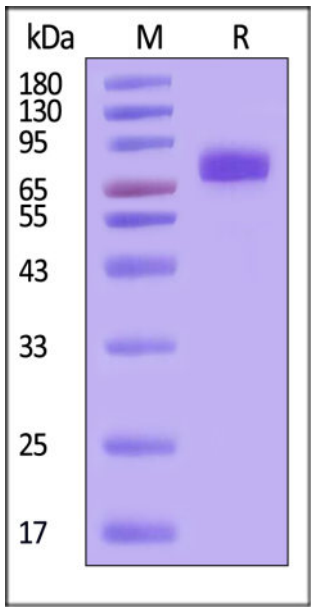
This product is stable after storage at:

- -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

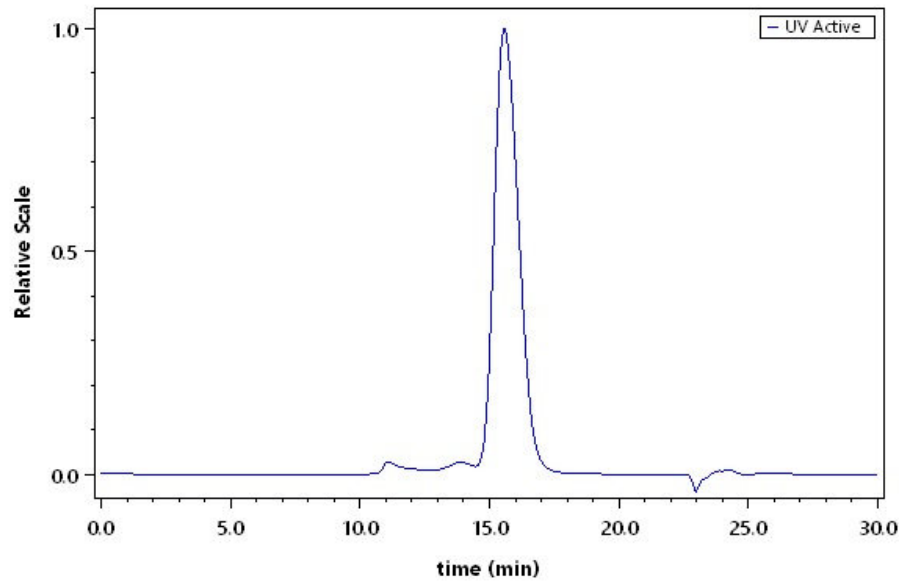
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



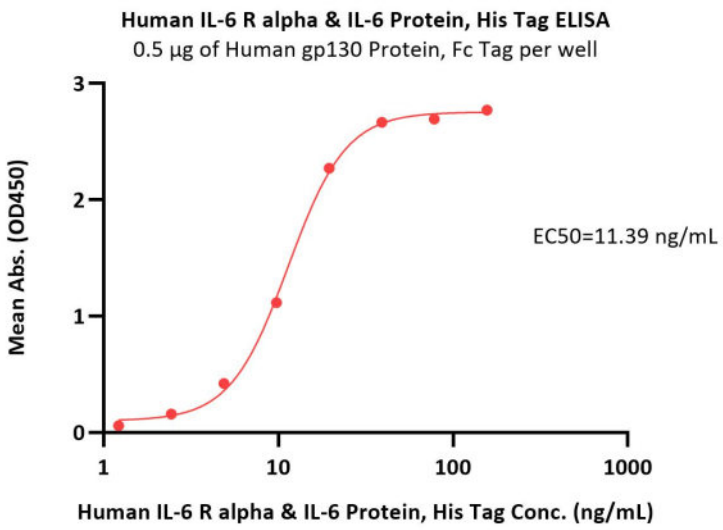
Human IL-6 R alpha & IL-6 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-HPLC



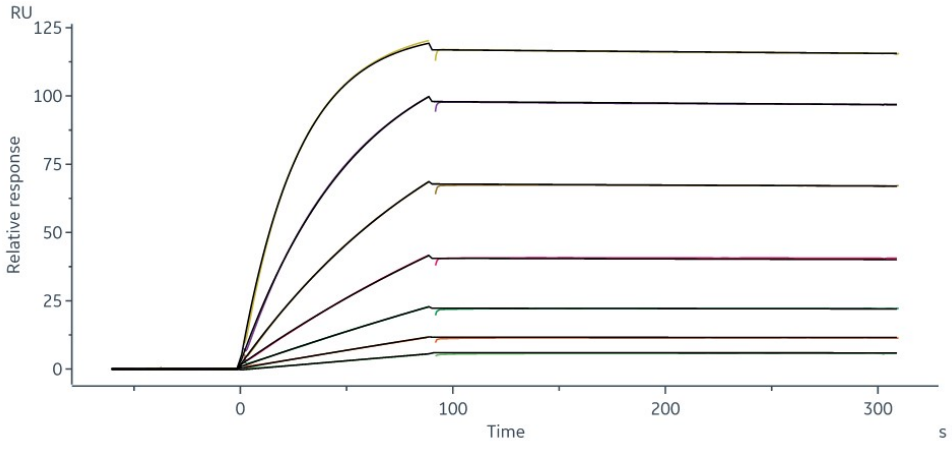
The purity of Human IL-6 R alpha & IL-6 Protein, His Tag (Cat. No. IL6-H52H4) was greater than 90% as determined by SEC-HPLC.

Bioactivity-ELISA



Immobilized Human gp130 Protein, Fc Tag (Cat. No. ILT-H5254) at 5 μg/mL (100 μL/well) can bind Human IL-6 R alpha & IL-6 Protein, His Tag (Cat. No. IL6-H52H4) with a linear range of 1-20 ng/mL (QC tested).

Bioactivity-SPR



Human gp130 Protein, Fc Tag (Cat. No. ILT-H5254) captured on Protein A Chip can bind Human IL-6 R alpha & IL-6 Protein, His Tag (Cat. No. IL6-H52H4) with an affinity constant of 0.036 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

Interleukin 6 (IL-6) is also known as HGF, BSF2, HSF and IFNB2, originally identified as a B cell differentiation factor, is a multifunctional cytokine that regulates immune responses, hematopoiesis, acute phase responses, and inflammatory reactions.It is secreted by T cells, macrophages , monocytes, fibroblasts, endothelial cells, et.al. to stimulate immune response to trauma, especially burns or other tissue damage leading to inflammation. Interleukin 6 has been shown to interact with

interleukin-6 receptor and glycoprotein. IL-6 is relevant to many disease processes such as diabetes, atherosclerosis, depression, Alzheimer's Disease, systemic, lupus erythematosus, prostate cancer and rheumatoid arthritis. Advanced/metastatic cancer patients have higher levels of IL-6 in their blood. Hence there is an interest in developing anti-IL-6 agents as therapy against many of these diseases.