

Human IL-6 Protein

Cat. No. IL6-HE001

Description

Source	Recombinant Human IL-6 is expressed from E.coli without tag. It contains Val30-Met212.
Accession	P05231
Molecular Weight	The protein has a predicted 20.8 kDa same as Bis-Tris PAGE result.
Endotoxin	Less than 0.05 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 90% as determined by HPLC

Formulation and Storage

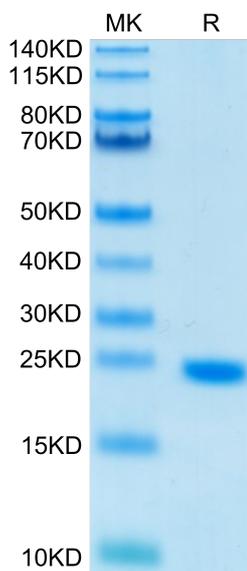
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

IL-6 (Interleukin-6) is a pleiotropic cytokine that acts in the acute phase reaction, inflammation, hematopoiesis, bone metabolism, and cancer progression. Interleukin 6 has been shown to interact with interleukin-6 receptor and glycoprotein.

Assay Data

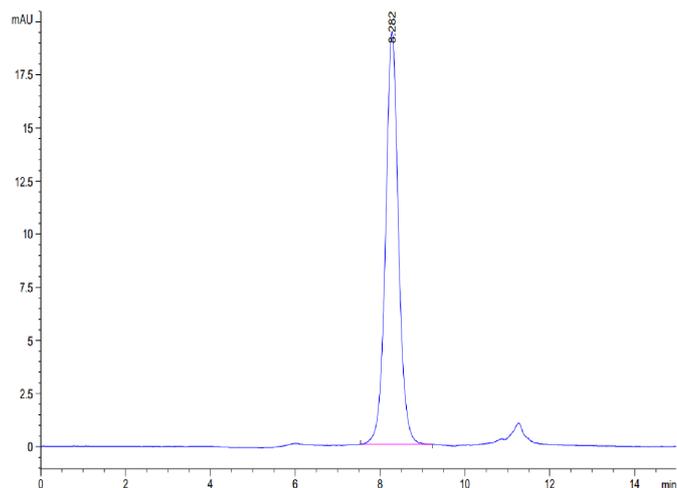
Bis-Tris PAGE



Human IL-6 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

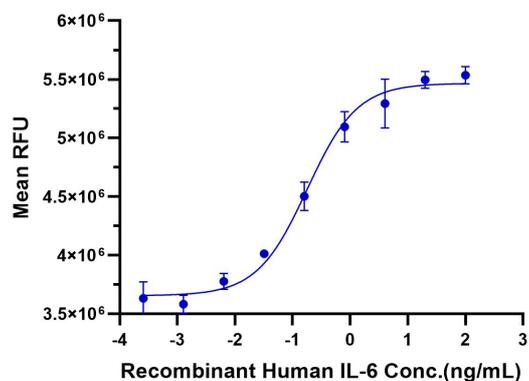
Assay Data



The purity of Human IL-6 is greater than 90% as determined by SEC-HPLC.

Cell Based Assay

Recombinant Human IL-6 Protein Bioactivity

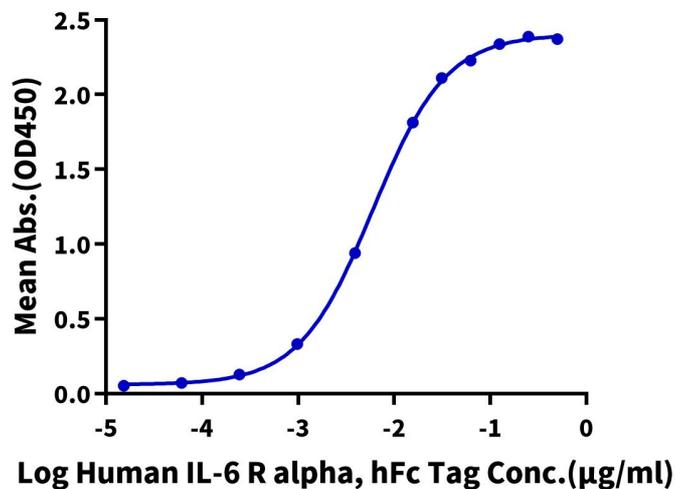


Measured in a cell proliferation assay using TF1 human erythroleukemic cells. The ED50 for this effect is 0.1 - 0.8 ng/mL.

ELISA Data

Human IL-6, No Tag ELISA

0.2µg Human IL-6, No Tag Per Well



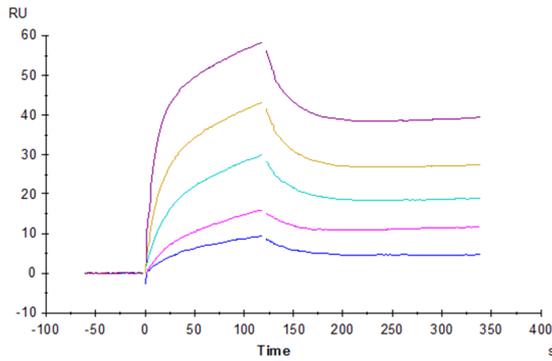
Immobilized Human IL-6 at 2µg/ml (100µl/Well) on the plate. Dose response curve for Human IL-6 R alpha, hFc Tag with the EC50 6.0ng/ml determined by ELISA.

SPR Data

Human IL-6 Protein

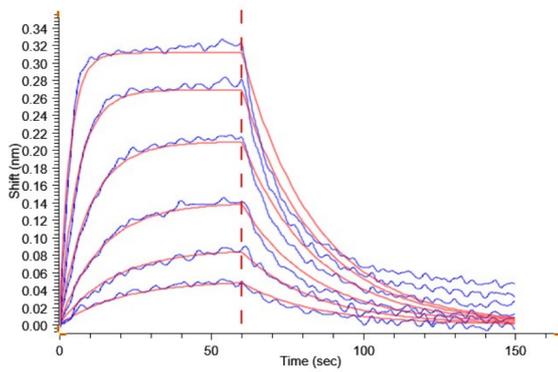
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Assay Data



Human IL-6 R alpha, His Tag captured on CM5 Chip via anti-his antibody can bind Human IL-6, No Tag with an affinity constant of 0.22 nM as determined in SPR assay (Biacore T200).

BLI Data



Loaded Human IL-6 R alpha, hFc Tag on ProA-Biosensor can bind Human IL-6, No Tag with an affinity constant of 16.50 nM as determined in BLI assay (Gator® Prime).