

Human IL-2 Protein, Ultra Low Endotoxin

Cat. No. IL2-HM001-UL

Description

| | |
|-------------------------|---|
| Source | Recombinant Human IL-2 Protein is expressed from HEK293 without tag. It contains Ala21-Thr153. |
| Accession | P60568 |
| Molecular Weight | The protein has a predicted MW of 15.41 kDa. Due to glycosylation, the protein migrates to 16-20 kDa based on Bis-Tris PAGE result. |
| Endotoxin | Less than 0.01 EU per µg by the LAL method. |
| Purity | > 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC |

Formulation and Storage

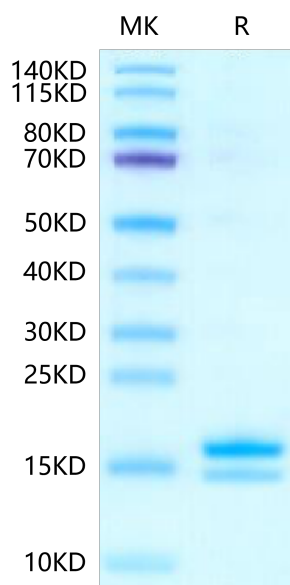
| | |
|-----------------------|---|
| Formulation | Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization. |
| Reconstitution | Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for 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

Interleukin-2 (IL-2) is an interleukin, a type of cytokine signaling molecule in the immune system. It is a 15,5 - 16 kDa protein that regulates the activities of white blood cells (leukocytes, often lymphocytes) that are responsible for immunity. IL-2 has essential roles in key functions of the immune system, tolerance and immunity, primarily via its direct effects on T cells.

Assay Data

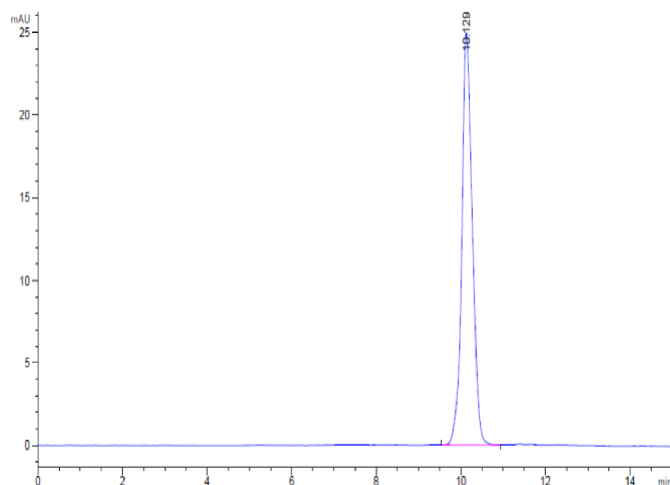
Bis-Tris PAGE



Human IL-2 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

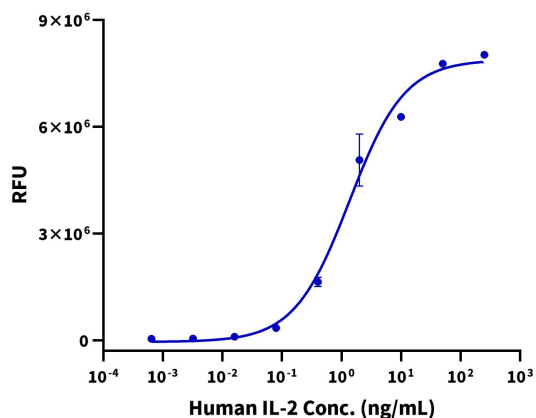
Assay Data



The purity of Human IL-2 is greater than 95% as determined by SEC-HPLC.

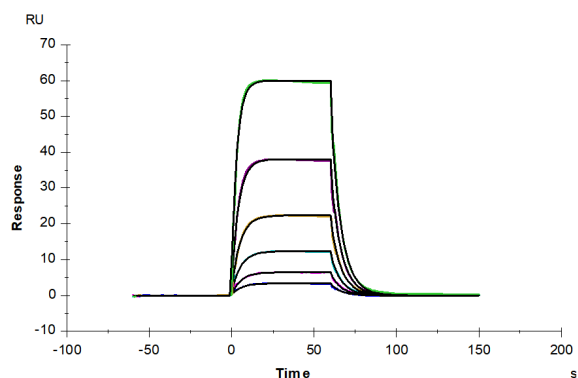
Cell Based Assay

Recombinant Human IL-2 Bioactivity



Measured in a cell proliferation assay using CTLL2 mouse cytotoxic T cells. The ED50 for this effect is 0.5-2 ng/mL.

SPR Data



Human IL-2 R beta, His Tag (Cat. CD1-HM122) captured on CM5 Chip via Anti-His Antibody can bind Human IL-2, No Tag with an affinity constant of $0.21 \mu\text{M}$ as determined in SPR assay (Biacore S200).