Human IL-2 Protein

Cat. No. IL2-HE001

Description

Source	Recombinant Human IL-2 Protein is expressed from E.coli without tag.
	It contains Ala21-Thr153.
Accession	P60568
Molecular Weight	The protein has a predicted 15.5 kDa same as Bis-Tris PAGE result.
Endotoxin	Less than 0.1 EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

Formulation and Storage

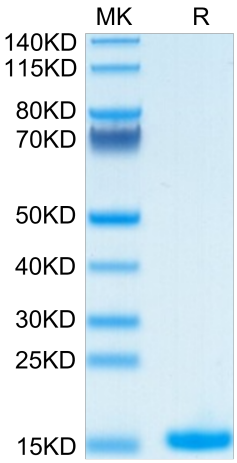
Formulation	Lyophilized from 0.22μm filtered solution in 100mM Acetic Acid. Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in 100mM Acetic Acid. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C 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.

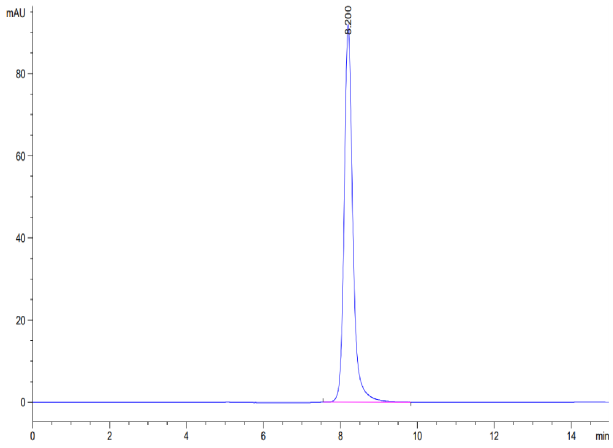
Assay Data

Bis-Tris PAGE



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

SEC-HPLC



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

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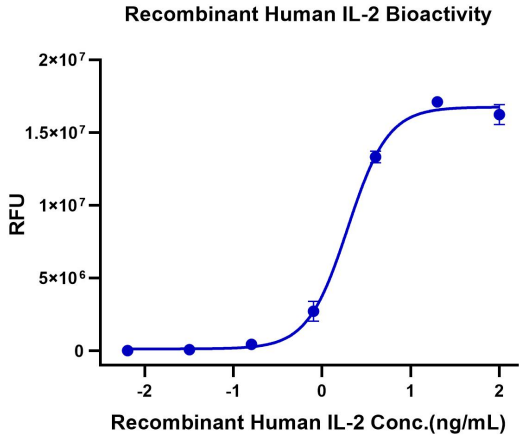
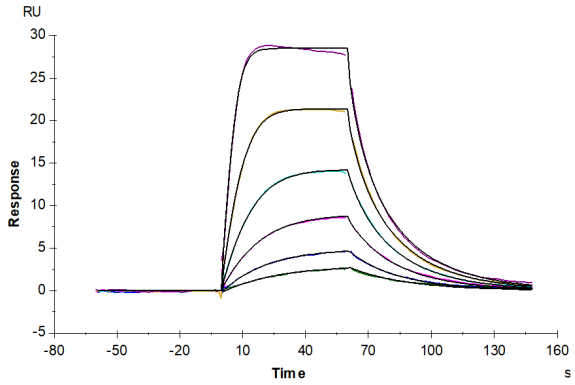
Assay Data

Cell Based Assay



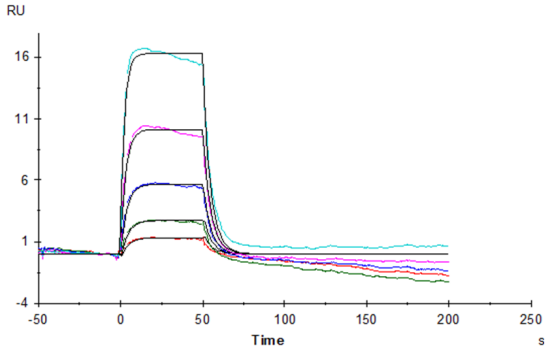
Measured in a cell proliferation assay using CTLL2 mouse cytotoxic T cells. The ED50 for this effect is 0.5-2 ng/mL (QC Test).

SPR Data



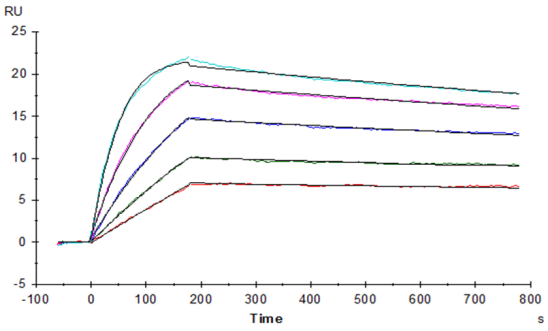
Human IL-2 R alpha, His Tag captured on CM5 Chip via anti-his antibody can bind Human IL-2, No Tag with an affinity constant of 16.82 nM as determined in SPR assay (Biacore T200).

SPR Data



Human IL-2 R beta, His Tag captured on CM5 Chip via Anti-His Antibody can bind Human IL-2, No Tag with an affinity constant of 0.25μM as determined in SPR assay (Biacore T200).

SPR Data



Human IL-2 R beta&IL-2 R gamma, hFc Tag captured on CM5 Chip via Protein A can bind Human IL-2, No Tag with an affinity constant of 0.114 nM as determined in SPR assay (Biacore T200).

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