Human IL-7 Protein

Cat. No. IL7-HE001

Description

Source	Recombinant Human IL-7 Protein is expressed from E.coli without tag.
	It contains Asp26-His177.
Accession	P13232
Molecular Weight	The protein has a predicted MW of 17.5 kDa same as Tris-Bis PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE
	> 95% as determined by HPLC

Formulation and Storage

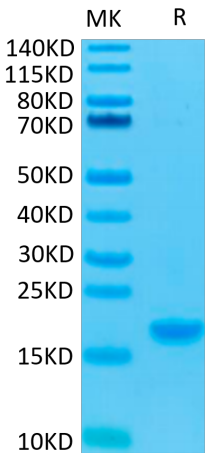
Formulation	Lyophilized from 0.22μm filtered solution in 25mM PB, 250mM NaCl (pH 6.8). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 μg/ml is recommended. Dissolve the lyophilized protein in 25mM PB, 250mM NaCl (pH 6.8).
Storage	-20 to -80°C for 12 months as supplied from date of receipt.-20 to -80°C for 3-6 months in unopened state after reconstitution.2-8°C for 2-7 days after reconstitution.Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Interleukin-7 (IL7) plays a nonredundant role in T cell survival and homeostasis, which is illustrated in the severe T cell lymphopenia of IL7-deficient mice, or demonstrated in animals or humans that lack expression of either the IL7Rα or γ c chain, the two subunits that constitute the functional IL7 receptor.

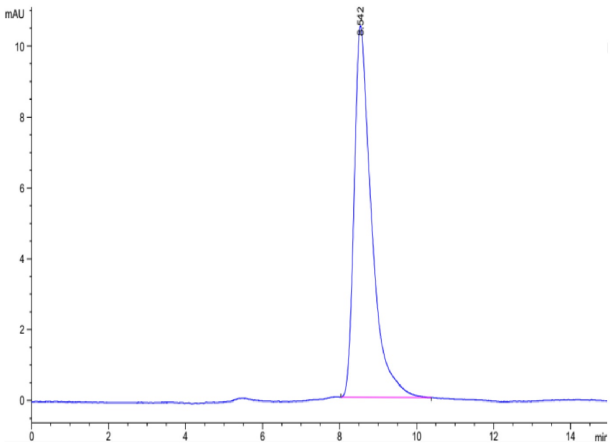
Assay Data

Tris-Bis PAGE



Human IL-7 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



The purity of Human IL-7 is greater than 95% as determined by SEC-HPLC.

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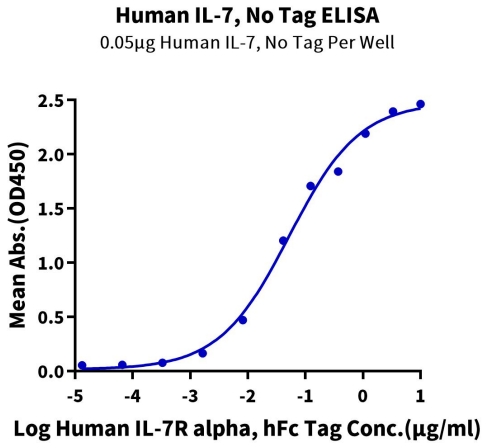
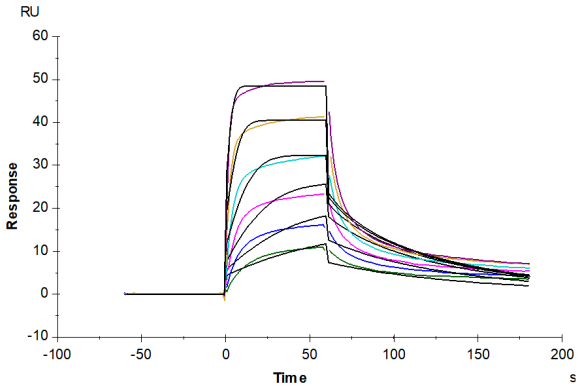
Assay Data

ELISA Data



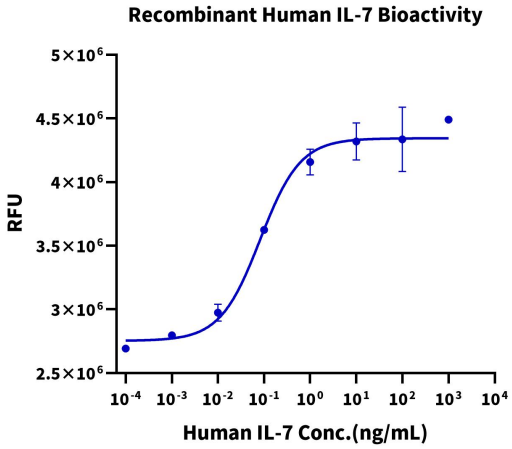
Immobilized Human IL-7 at 0.5μg/ml (100μl/Well) on the plate. Dose response curve for Human IL-7R alpha, hFc Tag with the EC50 of 52.5ng/ml determined by ELISA.

SPR Data



Human IL-7 R alpha, His Tag captured on CM5 Chip via anti-his antibody can bind Human IL-7, No Tag with an affinity constant of 4.18 nM as determined in SPR assay (Biacore T200).

Cell Based Assay



Measured in a cell proliferation assay using murine 2E8 cells. The ED50 for this effect is 0.1 - 0.5 ng/mL (QC tested).