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

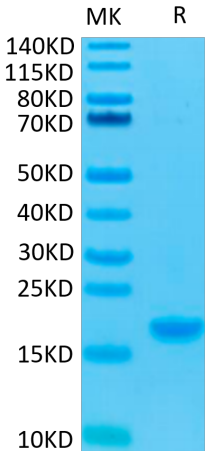
Formulation	Supplied as 0.22μm filtered solution in 25mM PB, 250mM NaCl (pH 6.8).
Storage	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

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.

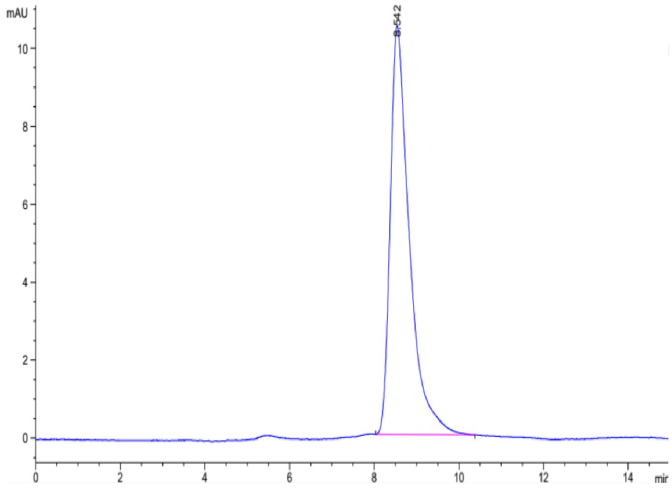
Assay Data

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.

ELISA Data

Human IL-7 Protein

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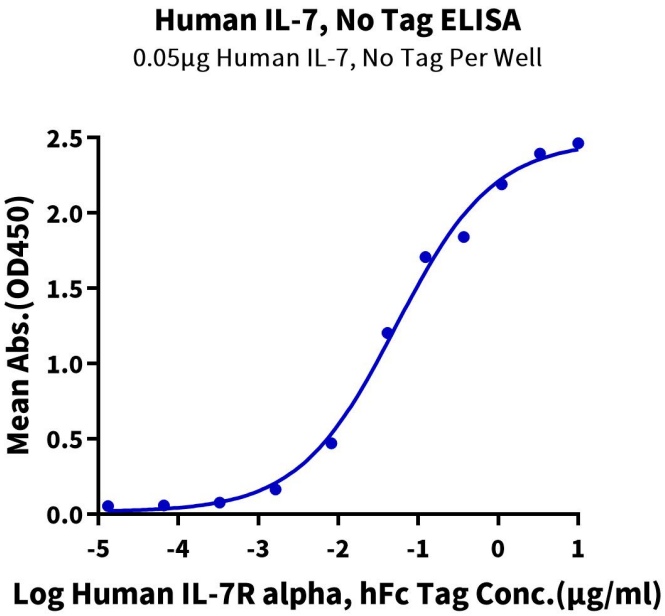
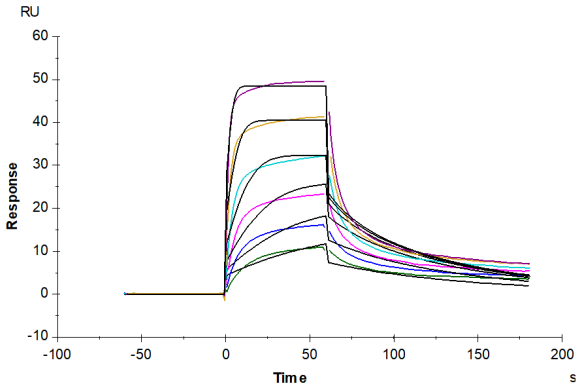
Assay Data



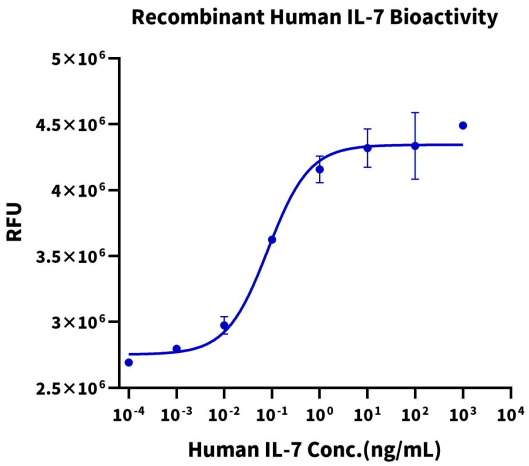
Immobilized Human IL-7 at 0.5μg/ml (100μl/Well) on the plate. Dose response curve for Human IL-7R alpha, hFc Tag with the EC50 of 52.5ng/ml determined by ELISA.

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).

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