IL-7 (C-6His), Human, Recombinant

Cat. No. : PCK080

General Information

Synonyms	Interleukin-7;IL-7;IL7
Species	Human
Expression host	Human Cells
Sequence	Asp26-His177
Accession	P13232
Tag	C-6His
Mol mass	18.4 kDa
Expiration date	12 months
Bio activity	Measured in a cell proliferation assay using PHA-activated human peripheral blood mononuclear cell (PBMC). The ED50 for this effect is 50-300 pg/mL.

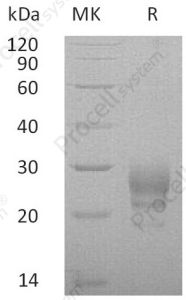
Product feature

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at -5~-20°C for 3 months.
Shipping	Ice bag
Formulation	Lyophilized from a 0.2 μm filtered solution of 20 mM PB, 150 mM NaCl, 4% Mannitol, pH 7.4.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μg/mL. Dissolve the lyophilized protein in sterile water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

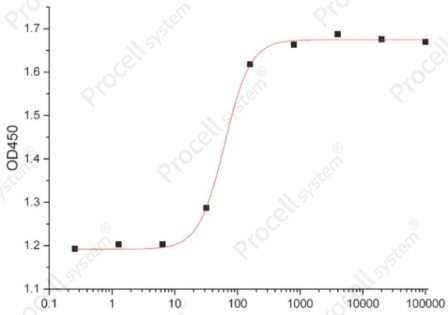
Background

Human Interleukin 7 (IL-7) is a potent lymphoid cell Growth Factor stimulating the proliferation of lymphoid progenitors. IL7 can associate with the hepatocyte Growth Factor (HGF) to form a hybrid Cytokine that functions as a pre-pro-B cell growth-stimulating factor. Human IL7 cDNA encodes a 177 amino acid precursor Protein containing a 25 amino acid signal peptide and a 152 amino acid mature Protein. Human and mouse IL7 share 65% sequence identity in the mature region and both exhibit cross-species activity. IL-7 signals via IL-7 Receptor (IL7R) activating multiple pathways including JaK/STAT and PI3K/AKT, which regulate lymphocyte survival, glucose uptake, proliferation, and differentiation. IL-7 is also associated with cytoplasmic IL2-R gamma for signal transduction.

SDS-PAGE



Bio activity



Measured in a cell proliferation assay using PHA-activated human peripheral blood lymphocytes (PBL). The ED50 for this effect is 50-300 pg/mL.

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