



Recombinant Human IL-7

Catalog #	EPT013
Expression Host	E.coli
DESCRIPTION	Recombinant Human Interleukin-7 is produced by our E.coli expression system and the target gene encoding Asp26-His177 is expressed.
Accession	P13232
Synonyms	Interleukin-7; IL-7; IL7
Mol Mass	17.5 KDa
AP Mol Mass	18 KDa, reducing conditions
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Endotoxin	Less than 0.001 ng/μg (0.01 EU/μg) as determined by LAL test.
FORMULATION	Lyophilized from a 0.2 μm filtered solution of 20mM PB, 300mM NaCl, pH 8.0.
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 μ g/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SHIPPING

The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

STORAGE

Lyophilized protein should be stored at $< -20^{\circ}\text{C}$, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at $4-7^{\circ}\text{C}$ for 2-7 days.

Aliquots of reconstituted samples are stable at $< -20^{\circ}\text{C}$ for 3 months.

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

