

Recombinant Human Interleukin 7, HQ-tagged

Cat. No. IL7-5333H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinanthuman IL7 contains 153 amino acids and a 16 aa HQ tag. Total length is 169aa.
Species	Human
Source	Hordeum Vulgare
Description	IL7 stimulates the differentiation of multipotent hematopoietic stem cells into lymphoid progenitor cells (as opposed to myeloid progenitor cells where differentiation is stimulated by IL-3). It also stimulates proliferation of all cells in the lymphoid lineage (B cells, T cells and NK cells). It is important for proliferation during certain stages of B-cell maturation, T and NK cells survival, development and homeostasis.
Form	Lyophilized from a 0.2 µm sterile filtered solution of PBS, pH 7.2.
Molecular Weight	Predicted MW = 19.7kDa including HQ tag. As a result of glycosylation, the recombinant protein migrates as two bands with an apparent MW = 19 and 21 kDa in SDS-PAGE.
Purity	>95% by SDS-PAGE. Purified product carries no pyrogenic or pro-inflammatory contaminants, as assayed with monocyte activation test using custom human Multiplex Cytokine Assay measuring IL-6, TNF-alpha and IL-1beta induction.
Endotoxin Level	< 0.005 ng per µg of product (0.05 EU/g) as measured by turbidimetric kinetic assay.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Biological Activity	The bioactivity of human IL7 was determined by dose-dependent cell proliferation assay on human bone marrow mononuclear cells, measuring intracellular ATP concentration with standardized luminometry. EC50 for a typical batch lies in the range of 48-72 ng/ml.
Reconstitution	Centrifuge vial prior to opening. First add sterile distilled water to the vial to fully solubilize the protein to a concentration not less than 100 µg/ml. After complete solubilization of the protein, it can be further diluted to other aqueous solutions.
Storage	The lyophilized protein, though stable at room temperature for few weeks, is best stored at -20°C to -80°C. Reconstituted protein should be used immediately or stored in working aliquots at -20°C to -80°C. Avoid repeated freeze-thaw cycles.
Official Symbol	IL7

GENE INFORMATION

Gene Name	IL7 interleukin 7 [Homo sapiens]
Synonyms	IL7; interleukin 7; IL-7; interleukin-7; OTTHUMP00000227044; OTTHUMP00000227046
Gene ID	3574
mRNA Refseq	NM_000880
Protein Refseq	NP_000871
MIM	146660
UniProt ID	P13232

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Chromosome Location	8q12-q13
Pathway	Cytokine-cytokinereceptor interaction; Hematopoietic cell lineage; Jak-STAT signaling pathway
Function	cytokine activity;cytokine receptor binding; growth factor activity; interleukin-7 receptorbinding; protein binding
Rendering based onPDB 1IL7.	