

Interleukin-7 (IL7) Active Protein | IL7 active protein

Recombinant Human Interleukin-7 (IL7)

CATALOG #
AAA235615

HOST
E Coli

PRODUCT SYNONYMS

Interleukin-7 (IL7); Recombinant Human Interleukin-7 (IL7); Interleukin-7; IL-7; IL7; IL7 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized from a 0.2 mum Filtered 20 mM PB, 250 mM NaCl, pH 7.2
Sequence Positions	26-177aa; Full Length of Mature Protein
Sequence	DCDIEGKDGK QYESVLMVSI DQLLDSMKEI GSNCLNNEFN FFKRHICDAN KEGMFLFRAA RKLRQFLKMN STGDFDLHLL KVSEGTILL NCTGQVKGRK PAALGEAQPT KSLEENKSLK EQKKLNDLCF LKRLLEIKT CWNKILMGTK EH
Sequence Length	115
Species	Human
Tag	Tag-Free
Endotoxin	Less than 1.0 EU/ug as determined by LAL method.
Biological Activity	The ED50 as determined in a cell proliferation assay using PHA-activated human peripheral blood lymphocytes (PBL) is less than 0.4 ng/ml.
Subcellular Location	Secreted
Protein Families	IL-7/IL-9 Family
Classification	Cytokine
Subdivision	Interleukin
Pathway	Jak-STAT Signaling Pathway
Preparation and Storage	Store at -20 degree C. For extended storage, conserve at -20 degree C or -80 degree C. Repeated freezing and thawing is not recommended. Store working aliquots at 4 degree C for up to one week.

ADDITIONAL INFORMATION

Related Product Information for IL7 active protein

Relevance: 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.

Function: Hematopoietic growth factor capable of stimulating the proliferation of lymphoid progenitors. It is important for proliferation during certain stages of B-cell maturation.

Product Categories/Family for IL7 active protein	Immunology
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NCBI AND UNIPROT INFORMATION

NCBI GI #	315467871
NCBI GeneID	3574
NCBI Accession #	NP_001186817.1
NCBI GenBank Nucleotide #	NM_001199888.1
UniProt Accession #	P13232
Molecular Weight	17.5 kDa
NCBI Official Full Name	interleukin-7 isoform 4
NCBI Official Synonym Full Names	interleukin 7
NCBI Official Symbol	IL7
NCBI Official Synonym Symbols	IL-7
NCBI Protein Information	interleukin-7
UniProt Protein Name	Interleukin-7
UniProt Gene Name	IL7
UniProt Synonym Gene Names	IL-7
UniProt Entry Name	IL7_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.