

Active Recombinant Human Interleukin 2

Cat. No. IL2-464H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant IL-2 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 134 amino acids and having a molecular mass of 15,517 Daltons.
Species	Human
Source	E.coli
ProteinLength	22-153 aa
Description	Interleukin-2, also know as T-cell Growth Factor, is an immunomodulatory cytokine produced by stimulated T-cells. Its activity is signaled via interaction with the IL-2R receptor.
Form	Human IL-2 is lyophilized at 1 mg/ml in 10 mM NaCitrate, pH 3.0.
Purity	Purity Greater than 90% as determined by: Analysis by RP-HPLC. Reducing and non-reducing SDS-PAGE.
Bio-activity	Recombinant Human IL-2 is fully bioactive when compared to standard. The ED50 as measured by the dose-dependent proliferation of CTLL-2 cells is 0.064 ng/ml.
Physical Appearance	Sterile Filtered white lyophilized (freeze-dried) powder.
Solubility	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is

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recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg"s/ml, which can be further diluted into other aqueous solutions.

Purity Greater than 90% as determined by

Analysis by RP-HPLC. Reducing and non-reducing SDS-PAGE.

Protein Content determined by

UV spectroscopy at 280 nm. Analysis by RP-HPLC calibrated against a known standard. Quantitation on SDS-PAGE against a known standard.

Endotoxin Level

Endotoxin level is <0.01ng/ug or <0.1EU/ug.

Amino acid sequence

MAPTSSSTKK TQLQLEHLLL DLQMILNGIN NYKNPKLTRM LTFKFYMPKK
ATELKHQCL EEELKPLEEV LNLAQSKNFH LRPRDLISNI NVIVLELKGS
ETTFMCEYAD ETATIVEFLN RWITFSQSII STLT

Storage

Lyophilized product is very stable at -20 degrees. Reconstituted material should be aliquoted and frozen at -20. It is recommended to add a carrier protein (0.1% HSA or BSA) for long term storage.

GENE INFORMATION

Gene Name

IL2 interleukin 2 [Homo sapiens]

Official Symbol

IL2

Synonyms

IL-2; TCGF; lymphokine; T-cell growth factor; Aldesleukin, Interleukin-2; interleukin-2 precursor; involved in regulation of T-cell clonal expansion; IL2; interleukin 2

Gene ID

3558

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mRNA Refseq	NM_000586
Protein Refseq	NP_000577
MIM	147680
UniProt ID	P60568
Chromosome Location	4q26-q27
Pathway	Cytokine-cytokine receptor interaction; Jak-STAT signaling pathway; T cell receptor signaling pathway; Type I diabetes mellitus
Function	interleukin-2 receptor binding; kinase activator activity

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