

GMP Recombinant Human IL2 protein

Cat. No. IL2-4317HG **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human IL2 protein was expressed in Escherichia coli. This product is produced under cGMP guidelines.
Species	Human
Source	E.coli
ProteinLength	133
Description	IL-2 is a powerful immunoregulatory lymphokine produced by T-cells in response to antigenic or mitogenic stimulation. It is expressed by CD4+ and CD8+ T cells, $\gamma\delta$ T cells, B cells, dendritic cells, and eosinophils. IL-2/IL-2R signaling is required for T-cell proliferation and other fundamental functions which are essential for the immune response. The receptor for IL-2 consists of three subunits (55 kDa IL2R α , 75 kDa IL2R β , 64 kDa common gamma chain γc /IL2R γ) that are present on the cell surface in varying preformed complexes. Mature human IL-2 shares 56 % and 66 % amino acid sequence identity with mouse and rat IL-2, respectively. Human and mouse IL-2 exhibit cross-species activity.
Form	Lyophilized from a 0.2 μ m filtered concentrated solution in 20 mM PB, pH 3.5.
Bio-activity	Fully biologically active when compared to standard. The ED50 as determined by a cell proliferation assay using murine CTLL-2 cells is less than 0.1 ng/ml, corresponding to a specific activity of $> 1.0 \times 10^7$ IU/mg.

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Molecular Mass	Approximately 15.4 kDa, a single non-glycosylated polypeptide chain containing 133 amino acids.
AA Sequence	APTSSSTKKTQLQLEHLLLDLQMILNGINNYKNPKLTRMLTFKFYMPKKATELKHLQC LEEEELKPLEEVNLNAQSKNFHLRPRDLISNINVIVLELKGSETTFMCEYADETATIVEFL NRWITFCQSIISTLT
Endotoxin	Less than 0.01 EU/g of rHuIL-2 GMP as determined by LAL method.
Purity	>98% by SDS-PAGE and HPLC analysis.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤-20 centigrade. Further dilutions should be made in appropriate buffered solutions. Do not reconstitute in cell culture media directly.

GENE INFORMATION

Gene Name	IL2
Official Symbol	IL2
Synonyms	IL2; interleukin 2; interleukin-2; IL 2; T cell growth factor; TCGF; aldesleukin; involved in regulation of T-cell clonal expansion; IL-2; lymphokine;

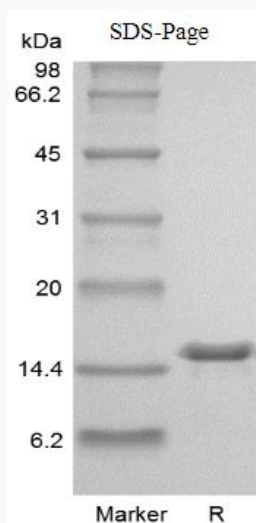
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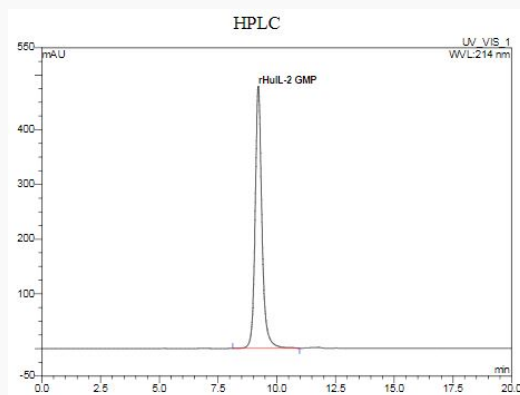
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Gene ID	3558
mRNA Refseq	NM_000586
Protein Refseq	NP_000577
MIM	147680
UniProt ID	P60568

SDS-PAGE of IL2-4317HG



HPLC of IL2-4317HG



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