

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.

 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

| | |
|-----------------------|--|
| Molecular Mass | Approximately 15.4 kDa, a single non-glycosylated polypeptide chain containing 133 amino acids. |
| AA Sequence | APTSSSTKKTQLQLEHLLLDLQMLNGINNYKNPKLTRMLTFKFYMPKKATELKHLCQ LEELKPLEEVLNLAQSKNFHLRPRDLISININVIVLELKGSETTFMCEYADETATIVEFL 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; |

 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

Gene ID 3558

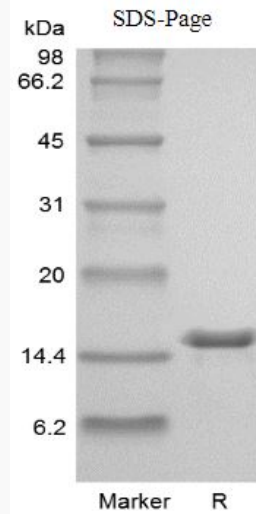
mRNA Refseq NM_000586

Protein Refseq NP_000577

MIM 147680

UniProt ID P60568

SDS-PAGE of IL2-4317HG

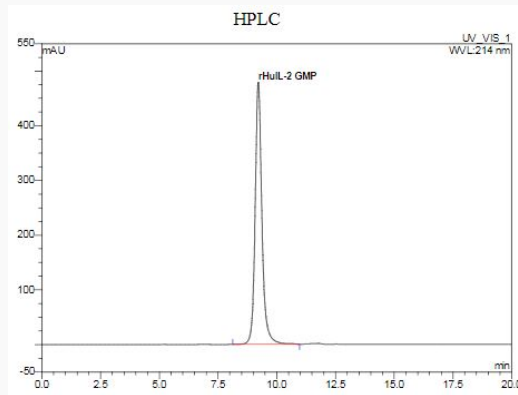


 Tel: 1-631-559-9269 1-516-512-3133

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

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

HPLC of IL2-4317HG



 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