

Recombinant Rat IL2 protein

Cat. No. IL2-575R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Rat IL2 protein was expressed in Escherichia coli.
Species	Rat
Source	E.coli
ProteinLength	135
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. Recombinant rat IL-2 is a 15.3 kDa protein containing 134 amino acid residues and it shares about 82 %, 66 %, 66 %, 60 % and 54 % amino acid sequence identity with mouse, human, rhesus macaque, pig and equus caballus IL-2, respectively.
Form	0.2 μ m Filtered concentrated sterile solution in 10 mM sodium citrate, pH 4.0.
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 0.2 ng/ml, corresponding to a specific activity of $> 5.0 \times 10^6$ 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 15.5 kDa, a single non-glycosylated polypeptide chain containing 135 amino acids.
AA Sequence	APTSSPAKETQQHLEQLLLDLQVLLRGIDNYKNLKLPMMLTFKFYLPKQATELKHLLQ CLENELGALQRVLDLTQSKSFHLEDAGNFISNIRVTVVKLKGSENKFECQFDDEPAT VVEFLRRWIAICQSIISTMTQ
Endotoxin	Less than 1 EU/μg of rRtIL-2 as determined by LAL method.
Purity	>97% 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 or aqueous buffer containing 0.1 % BSA 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.

GENE INFORMATION

Gene Name	IL2
Official Symbol	IL2
Synonyms	T-cell Growth Factor, CGF
Gene ID	116562

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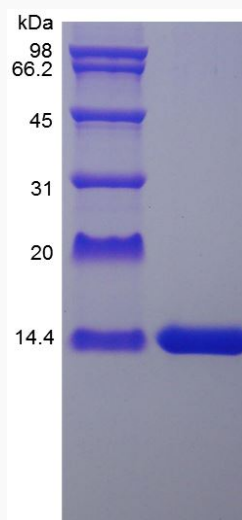
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mRNA Refseq NM_053836

Protein Refseq NP_446288

UniProt ID P17108

SDS-PAGE of IL2-
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