

## Recombinant Rat IL2 protein

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

### SPECIFICATION

<b>Product Overview</b>	Recombinant Rat IL2 protein was expressed in Escherichia coli.
<b>Species</b>	Rat
<b>Source</b>	E.coli
<b>ProteinLength</b>	135
<b>Description</b>	<p>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, <math>\gamma\delta</math> 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<math>\alpha</math>, 75 kDa IL2R<math>\beta</math>, 64 kDa common gamma chain <math>\gamma c</math>/IL2R<math>\gamma</math>) 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.</p>
<b>Form</b>	0.2 $\mu$ m Filtered concentrated sterile solution in 10 mM sodium citrate, pH 4.0.
<b>Bio-activity</b>	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](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

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

<b>Molecular Mass</b>	Approximately 15.5 kDa, a single non-glycosylated polypeptide chain containing 135 amino acids.
<b>AA Sequence</b>	APTSSPAKETQQHLEQLLLDLQVLLRGIDNYKNLKLPMMLTFKFYLPKQATELKHLLQ CLENELGALQRVLDLTQSKSFHLEDAGNFISNIRVTVVKLKGSENKFECQFDDEPAT VVEFLRRWIAICQSIISTMTQ
<b>Endotoxin</b>	Less than 1 EU/μg of rRtIL-2 as determined by LAL method.
<b>Purity</b>	>97% by SDS-PAGE and HPLC analysis.
<b>Storage</b>	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.
<b>Reconstitution</b>	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

<b>Gene Name</b>	IL2
<b>Official Symbol</b>	IL2
<b>Synonyms</b>	T-cell Growth Factor, CGF
<b>Gene ID</b>	116562

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

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

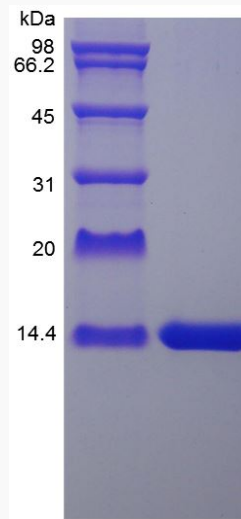
 45-1 Ramsey Road, Shirley, NY 11967, USA

mRNA Refseq [NM\\_053836](#)

Protein Refseq [NP\\_446288](#)

UniProt ID [P17108](#)

SDS-PAGE of I12-575R



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

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

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