Il2
Recombinant Mouse Interleukin-2

Catalog No.	CRI145A	**Quantity:**	5 µg
	CRI145B		20 µg
	CRI145C		1.0 mg

Alternate Names: IL-2, lymphokine, aldesleukin, T cell growth factor

Description: Interleukin-2 (IL-2) is an immunomodulatory cytokine that is produced by lymphocytes. IL-2 signals through the IL-2R receptor to induce activated T cell proliferation and promote T cell differentiation. IL-2 also stimulates the proliferation and differentiation of B cells, natural killer cells, monocytes, and macrophages. The receptor for IL-2 consists of three subunits that are present on the cell surface in varying pre-formed complexes . The 55 kDa IL-2 Rα is specific for IL-2 and binds with low affinity. The 75 kDa IL-2 Rβ, which is also a component of the IL-15 receptor, binds IL-2 with intermediate affinity. The 64 kDa common gamma chain receptor transduces the signal. IL-2 contributes to T cell homeostasis by promoting the Fas-induced death of naïve CD4+ T cells but not activated CD4+ memory lymphocytes . IL-2 plays a central role in the expansion and maintenance of regulatory T cells, although it inhibits the development of Th17 polarized cells . Recombinant Mouse IL-2 (IL-2) is a single, non-glycosylated polypeptide chain containing 150 amino acids.

Gene ID: 16183

Protein Accession No.: P04351

Source: *E. coli*

Molecular Weight: 17.4 kDa

Formulation: Lyophilized from a sterile-filtered aqueous solution containing 10 mM sodium citrate, pH 4.0.

Purity: >95% by SDS-PAGE

Endotoxin Level: ≤1 EU/µg of protein by kinetic LAL analysis

Biological Activity: Fully biologically active when compared to standard. The ED_{50} determined by a cell proliferation assay using murine CTLL-2 cells is less than 5 ng/ml.

Specific Activity: ≥ 2×10^5 U/mg

Amino Acid Sequence: MAPTSSSTSS STAEAQQQQQ QQQQQQQHLE QLLMDLQELL SRMENYRNLK LPRMLTFKFY LPKQATELKD LQCLEDELGP LRHVLDLTQS KSFQLEDAEN FISNIRVTVV KLKGSDNTFE CQFDDESATV VDFLRRWIAF CQSIISTSPQ

Reconstitution: **Centrifuge vial prior to opening.** Add sterile 10mM acetic acid to a concentration of 0.1 mg/ml. **DO NOT VORTEX.** Allow several minutes for complete reconstitution. Further dilutions should be made in appropriate buffered solutions.

Storage & Stability: Lyophilized product is stable at room temperature for shipping purposes. Upon receipt, store desiccated at -20°C for up to 1 year.

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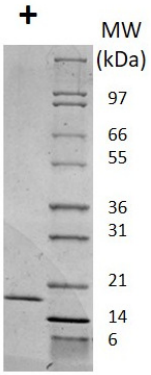
Upon reconstitution, the preparation is stable for up to one month at 2-8°C. For long term storage, freeze in working aliquots and store at -20 to -80°C. For maximal stability, dilute to working aliquots in a 0.1% BSA solution. **Avoid repeated freeze-thaw cycles.**

Figure: 1 µg run under (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue.



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