

Interleukin-2 (IL-2) Human, E. coli Recombinant Protein

Product Data Sheet

Cat. No.:	A32090010	A32090050	A32091000
Size:	10 µg	50 µg	1 mg

Description

Our bioactive *Interleukin-2 (IL-2) Human, E. coli Recombinant Protein* is a single, nonglycosylated polypeptide chain containing 133 amino acids and has a molecular mass of 15.4 kDa. The IL-2 is purified by proprietary chromatographic techniques.

Summary

IL-2 is a secreted cytokine that is important for the proliferation of T and B lymphocytes. The receptor of this cytokine is a heterotrimeric protein complex whose gamma chain is also shared by interleukin 4 (IL-4) and interleukin 7 (IL-7). The expression of this gene in mature thymocytes is monoallelic, which represents an unusual regulatory mode for controlling the precise expression of a single gene. The targeted disruption of a similar gene in mice leads to ulcerative colitis-like disease, which suggests an essential role of this gene in the immune response to antigenic stimuli.

Other Names

Interleukin 2, IL2, T-cell growth factor (TCGF), UniProtKB# P60568

Amino Acid Sequence

APTSSSTKK TQLQLEHLLL DLQMILNGIN NYKNPKLTRM LTFKFYMPKK ATELKHLQCL EEELKPLEEV LNLAQSKNFH LRPRDLISNI NVIVLELKGS ETTFMCEYAD ETATIVEFLN RWITFCQSII STLT.

Source

E. coli



Formulation

Sterile filtered white lyophilized (freeze-dried) powder. The protein was lyophilized from a 0.2 μ m filtered concentrated solution (1.0 mg/ml) in PBS, pH 5.0.

Purity

Greater than 97.0% as determined by:

- 1. Analysis by RP-HPLC.
- 2. Analysis by SDS-PAGE.

Biological Activity

The ED_{50} as determined by the dose-dependent stimulation of murine CTLL-2 cells is less than 0.1 ng/ml, corresponding to a Specific Activity of $1 \times 10^7 IU/mg$.

Reconstitution

It is recommended to reconstitute the lyophilized Interleukin-2 in sterile distilled water not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage/Expiration

Lyophilized IL-2, although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution, IL-2 should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). **Please prevent freeze-thaw cycles.**

Usage

This product is intended for **Laboratory Research Use Only**. Not for use in diagnostic or therapeutic procedures. This product may not be used as a pharmaceutical or veterinary drug, agricultural product, or food additive.