

# Interleukin-2, mouse recombinant (rmIL-2)

Catalog No: 94960 Lot No: XXXXX Source: *E. coli* 

**Synonyms:** Interleukin-2, T-cell growth factor (TCGF), Aldesleukin, Lymphokine, IL-2

### **Background**

IL2 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 (IL4) and interleukin 7 (IL7). 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.

## Description

Interleukin-2 Mouse Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 148 amino acids and having a molecular mass of 17.2kDa. The IL-2 is purified by proprietary chromatographic techniques.

## **Physical Appearance**

Sterile filtered white lyophilized (freeze-dried) powder.

## **Formulation**

Lyophilized from a 0.2µm filtered concentrated solution (1mg/ml) in 20mM PBS, pH 7.4.

### Solubility

It is recommended to reconstitute the lyophilized Interleukin-2 in sterile 18 M $\Omega$ -cm H $_2$ O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

## Stability

Lyophilized Interleukin-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.

#### **Purity**

Greater than 97.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

#### **Amino Acid Sequence**

PTSSSTSSST AEAQQQQQQQ QQQQQHLEQL LMDLQELLSR MENYRNLKLP RMLTFKFYLP KQATELKDLQ CLEDELGPLR HVLDLTQSKS FQLEDAENFI SNIRVTVVKL KGSDNTFECQ FDDESATVVD FLRRWIAFCQ SIISTSPQ

## Activity

The ED<sub>50</sub> as determined by the dose-dependant stimulation of murine CTLL-2 cells is less than 0.2ng/ml corresponding to a Specific Activity of  $5x10^6$ IU/mg.





## Usage

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