



## Interleukin-2, equine recombinant (reIL-2)

**Catalog No:** 97647  
**Lot No:** XXXXX  
**Source:** *E. coli*  
**Synonyms:** Interleukin-2, IL-2, T-cell growth factor, TCGF, IL2

### 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

Recombinant Equine Interleukin-2 produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 129 amino acids (with a substitution of S for C - at position 141 compared with the wild type IL2) and having a molecular mass of 14.9 kDa. IL-2 Equine is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

### Formulation

Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 6.0.

### Solubility

It is recommended to reconstitute the lyophilized IL2 in sterile 18 MΩ-cm H<sub>2</sub>O not less than 100 µg/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 IL2 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 SDS-PAGE and HPLC analyses.

### Amino Acid Sequence

APTSSSKRET QQQLKQLQMD LKLLLEGVNN NKNPKLSKML TFKINMPKKA TELKHLQCLE EELKPLEEML KNFLSKDIKE  
LMSNINVTVL GLKGSETRFT CEYDDETGTI VEFLNKWITF SQSIFSTMT

### Activity

The ED50 as determined by a cell proliferation assay using murine CTLL-2 cells is less than 1.0 µg/ml, corresponding to a specific activity of > 1000 IU/mg.



#### Usage

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