



## Interleukin-1 beta, mouse recombinant (rIL-1-beta)

**Catalog No:** 50441  
**Lot No:** XXXXX  
**Source:** *E. coli*  
**Synonyms:** Catabolin, Lymphocyte-activating factor (LAF), Endogenous Pyrogen (EP), Leukocyte Endogenous Mediator (LEM), Mononuclear Cell Factor (MCF), IL1F2, IL-1 beta

### Background

Interleukin-1b is produced by activated macrophages, IL-1B stimulates thymocyte proliferation by inducing il-2 release, b-cell maturation and proliferation, and fibroblast growth factor activity. IL1B proteins are involved in the inflammatory response, being identified as endogenous pyrogens, and are reported to stimulate the release of prostaglandin and collagenase from synovial cells.

### Description

Interleukin-1 beta mouse recombinant produced in *E. coli* is a non-glycosylated, polypeptide chain containing 153 amino acids and having a molecular mass of 17500 Dalton. IL-1b is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

### Formulation

Mouse IL-1b was lyophilized from sterile filtered aqueous solution 10 mM sodium phosphate, pH 7.5.

### Solubility

It is recommended to reconstitute the lyophilized Interleukin-1b in sterile 18 M $\Omega$ -cm H<sub>2</sub>O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

### Stability

Lyophilized Interleukin-1b, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL1b 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 95.0% as determined by SDS-PAGE.

### Amino Acid Sequence

MVPIRQLHYR LRDEQQKSLV LSDPYELKAL HLNQGNINQQ VIFSMSFVQG EPSNDKIPVA LGLKGNLYL SCVMKDGTPPT  
LQLESVDPKQ YPKKKMEKRF VFNKIEVKSK VEFESAEPN WYISTSQAEH KPVFLGNNSG QDIIDFTMES VSS

### Activity

The activity as determined by the dose-dependant stimulation of mouse D10S cells is 0.9 – 1.3 pg/ml, corresponding to a specific activity of 1.1 x 10<sup>6</sup> IU/mg.

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### Usage

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