

## Recombinant Rat Interleukin-1beta (rr IL-1beta)

**Synonyms:** Catabolin, Lymphocyte-activating factor (LAF), Endogenous Pyrogen (EP), Leukocyte Endogenous Mediator (LEM), Mononuclear Cell Factor (MCF), IL1F2, IL-1 beta.

**Introduction:** Interleukin-1b is produced by activated macrophages. It stimulates thymocyte proliferation by inducing IL-2 release, b-cell maturation and proliferation, and fibroblast growth factor activity. IL-1B 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:** Recombinant rat Interleukin-1b produced in E.Coli is a non-glycosylated, Polypeptide chain containing 153 amino acids and having a molecular mass of 17.3 kDa .  
The IL-1b is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*.

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.  
The aliquotes of 1µg and 2 µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rr IL-1b in sterile 18MΩ-cm H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rr IL-1b, although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rr IL-1b 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:** 97.0% as determined by SDS-PAGE.

**Amino acid sequence:**

MVPIRQLHCRLRDEQQKCLVLSDPCELKALHLNGQNISQQVVFMSMF  
VQGETSNDKIPVALGLKGLNLYLSCVMKDGTPTLQLESVDPKQYPPK  
KMEKRFVFNKIEVKTKVEFESAQFPNWWYISTSQAEHRPVFLGNSNGRD  
IVDFTMEPVSS.

**Biological Activity:** The ED<sub>50</sub> was found to be less than 0.1ng/ml, determined by the dose dependent proliferation of mouse D10S cells, corresponding to a specific activity of 10,000,000 units/mg.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 µg	Cat.N°	13340012
<i>medium</i>	10 µg	Cat.N°	13340013

**ImmunoTools** Excellent Quality - Advantageously priced

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