

## Recombinant Murine Interleukin-1beta (rm IL-1b / rm IL1F2)

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

**Introduction:** 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. Interleukin-1b stimulates thymocyte proliferation by inducing IL-2 release, b-cell maturation and proliferation, and fibroblast growth factor activity.

**Description:** Rm Interleukin-1b produced in E.Coli is a non-glycosylated, polypeptide chain containing 153 amino acids and having a molecular mass of 17.5 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 0.22 µm filtered solution in PBS, pH 7.2.  
The aliquots of 1µg contain Trehalose 5% (w/vol) for better recovery

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

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

**Endotoxicity:** The endotoxin level is less than 1 EU / µg determined by LAL method

**Amino acid sequence:** MVPIRQLHYR LRDEQQKSLV LSDPYELKAL HLNGQNINQQ VIFSMSFVQG  
EPSNDKIPVA LGLKGKNLYL SCVMKDGTP LQLESVDPKQ YPKKKMEKRF VFNKIEVKSK VEFESAEFPN  
WYISTSQAEH KPVFLGNNSG QDIIDFTMES VSS

**Biological Activity:** The ED<sub>50</sub> as determined by the dose-dependant stimulation of murine D10 cells is < 2 pg/ml, corresponding to a specific activity of 5 x10<sup>8</sup> IU/mg.

This material is offered for **research 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°	12340012
<i>medium</i>	10 µg	Cat.N°	12340013
<i>large</i>	50 µg	Cat.N°	12340015
<i>x-large</i>	250 µg	Cat.N°	12340017
<i>xx-large</i>	1000 µg	Cat.N°	12340018

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