

Recombinant Human Interleukin-1 beta (rh IL-1beta / IL1F2)

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

Introduction: Interleukin-1beta is produced by activated macrophages, IL-1beta stimulates thymocyte proliferation by inducing IL-2 release, b-cell maturation and proliferation and fibroblast growth factor activity. IL-1beta 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 human IL-1beta produced in *E.Coli* is a non-glycosylated, polypeptide chain containing 153 amino acids and having a molecular mass of 17 kDa. The rh IL-1beta is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*

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

Formulation: Lyophilized from a 0.22µm filtered solution in 25 mM Phosphate buffer, 100 mM NaCl, pH 7.1. The aliquots of 1µg and 2µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rh IL-1beta in sterile H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh IL-1beta although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rh IL-1beta 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 / silver stain.

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

Amino acid sequence: APVRSLNCTL RDSQQKSLVM SGPYELKALH LQGQDMEQQV VFSMSFVQGE
ESNDKIPVAL GLKEKNLYLS CVLKDDKPTL QLESVDPKNY PKKKMEKRFV FNKIEINNKL EFESAQFPNW
YISTSQAENM PVFLGGTKGG QDITDFTMQF VSS

Biological Activity: The specific activity as determined in the test of augmentation of lymphocyte proliferation assay using mouse thymus was found to be 2.0 x 10⁸ IU/ 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°	11340012
<i>medium</i>	10 µg	Cat.N°	11340013
<i>large</i>	50 µg	Cat.N°	11340015
<i>x-large</i>	250 µg	Cat.N°	11340017
<i>xx-large</i>	1000 µg	Cat.N°	11340018

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