

Datasheet

Interleukin-1 beta

Human Recombinant

Product	Description	Catalogue-No.	Size
IL-1 β	Interleukin-1 beta, human recombinant	CB-2130120 CB-2130121	2 μ g 10 μ g

Product description

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

Interleukin-1 beta (IL-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. 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. IL-1b human recombinant produced in E. coli is a non-glycosylated, polypeptide chain containing 153 amino acids and having a molecular mass of 17,000 Dalton. The IL-1b is purified by proprietary chromatographic techniques.

Solubility and storage conditions

It is recommended to reconstitute the lyophilized IL-1b in sterile distilled water not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions. Lyophilized IL-1b although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution IL-1b should be stored at 2-8° C up to 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.

Composition

Sterile filtered white lyophilized (freeze-dried) powder. The protein was lyophilized from a concentrated (1 mg/ml) sterile solution containing 50 mM phosphate buffer pH 7.1 and 150 mM NaCl.

Purity: > 98.0% as determined by RP-HPLC analysis and by SDS-PAGE.

Protein quantitation was carried out by two independent methods: 1. UV spectroscopy at 280 nm using the absorbency value of 0.631 as the extinction coefficient for a 0.1% (1 mg/ml) solution. 2. Analysis by RP-HPLC, using a calibrated solution of IL-1b recombinant as a reference standard.

Amino acid sequence: The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Pro-Val-Arg-Ser.

Biological activity: The specific activity as determined in the test of augmentation of lymphocyte proliferation assay using mouse thymus and was found to be 200,000 units/ μ g.

Suitability

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY!
 Not approved for human or animal diagnostic or therapeutic procedures.

Technical Support

For technical support or questions or please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email info@pan-biotech.com

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