

Interleukin-1 beta (IL-1-beta), porcine recombinant

Catalog No: 87330 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 porcine recombinant produced in *E. coli* is a non-glycosylated, polypeptide chain containing 154 amino acids and having a molecular mass of 17690 Dalton. IL-1b is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

The protein was lyophilized with no additives.

Solubility

It is recommended to reconstitute the lyophilized Interleukin-1b in sterile 18 M Ω -cm H $_2$ O not less than 100 μ 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 (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Ala-Asn-Val-Gln.

Activity

The ED50 as determined by the dose-dependant stimulation of murine D10S cells is <10 ng/ml corresponding to a specific activity of 100,000 IU/mg.

Usage

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