

DATASHEET

Name	IL-1 B, REC.RAT		
Product	Interleukin-1 beta, Re. Rat	Article-No.	40125
Formulation	White powder - lyophilised with no additives	Storage	Freezer at -20°C Prevent freeze-thaw cycles

Introduction:

Interleukin-1 beta 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:

Recombinant Rat Interleukin-1 beta produced in *Escherichia Coli* is a non-glycosylated, Polypeptide chain containing 153 amino acids and having a molecular mass of 17415.82 Dalton. The rIL-1b is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

Solubility:

It is recommended to reconstitute the lyophilised rIL-1b in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Stability:

Lyophilised rIL-1b, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rIL-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).

Purity: > 95.0% (per RP-HPLC & SDS-PAGE)

Amino acid sequence:

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Val-Pro-Ile-Arg.

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Biological Activity:

The ED₅₀ range= 0.2-0.5 ng/ml, determined by the dose dependent proliferation of mouse D10S cells

Protein content:

Protein quantification was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 0.558 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).
2. Analysis by RP-HPLC, using a standard solution of Interleukin-1 beta as a reference standard.

Usage:

Our products are intended for lab research only. Not for human, animal or diagnostic use.