



Product Datasheet

Product Name	Interleukin-1 alpha Rat Recombinant
Cata No	CB500283
Source	<i>Escherichia Coli.</i>
Synonyms	Hematopoietin-1, Lymphocyte-activating factor (LAF), Endogenous Pyrogen (EP), Leukocyte Endogenous Mediator (LEM), Mononuclear Cell Factor (MCF), IL-1 alpha,IL1, IL-1A, IL1F1.

Description

Interleukin-1 alpha is a proinflammatory cytokine produced by a wide variety of cell types, including macrophages, osteoblasts, monocytes and hepatocytes. Circulating levels of are normally low and only rise after stimulation by agents such as those produced byinflammation, infection or microbial endotoxins. IL-1 alpha possesses a wide variety of biological activities and exerts its effects by binding to specific cell surface receptors.

Interleukin-1A Rat Recombinant produced in E.Coli is single, a non-glycosylated, Polypeptide chain containing 155amino acids and having a molecular mass of 17703 Dalton.

The IL-1A is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Biological Activity

The ED50 as determined by the dose-dependant stimulation of murine D10S cells is < 0.005 ng/ml, corresponding to a Specific Activity of 2×10^8 IU/mg.

Purity

Greater than 98.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

The protein was lyophilized from a concentrated (1mg/ml) sterile solution containing 50mM Tris-HCL, pH=8.

Stability

Lyophilized Interleukin-1a although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL1A 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.

Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Pro-His-Ser-Phe.

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