# **Product Datasheet**

Product Name Interleukin-1 alpha Human Recombinant

Cata No CB500015

Source Escherichia Coli.

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 Human Recombinant produced in E.Coli is single, a non-glycosylated, Polypeptide chain containing 159 amino acids and having a molecular mass of 18022 Dalton.

The IL-1A is purified by proprietary chromatographic techniques

## **Purity**

Greater than 98.0% as determined by:

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

#### **Specific Activity**

The ED50 as determined by the dose-dependant stimulation of murine D10S cells is < 0.001 ng/ml, corresponding to a Specific Activity of 1 x 10<sup>9</sup> IU/mg.

# **Storage**

Lyophilized Interleukin-1 alpha although stable at room temperature for 3 weeks, should be stored desiccated

below -18 $^{\circ}$ C. Upon reconstitution IL-1a should be st ored at 4 $^{\circ}$ C between 2-7 days and for future use below -1 8 $^{\circ}$ C. Please prevent freeze-thaw cycles.

#### **Formulation**

The protein was lyophilized from a concentrated (1mg/ml) sterile solution containing 20mM Tris-HCL, pH=8, 5mM MgCl2 and 10% glycerol.

#### Quantitation

Protein quantitation was carried out by two independent methods:

- UV spectroscopy at 280 nm using the absorbency value of 1.13 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 IL-1 as a Reference Standard.