

DATASHEET

Name	IL-1 A, REC.PORCINE		
Product	Interleukin-1 alpha, Rec. Porcine	Article-No.	40122
Formulation	White powder - lyophilised from a concentrated (1mg/ml) sterile solution containing 50mM Tris-HCL, pH=8	Storage	Freezer at -20°C Prevent freeze-thaw cycles

Introduction:

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 by inflammation, 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.

Description:

Recombinant Porcine Interleukin-1 alpha in *Escherichia Coli* is single, a non-glycosylated, polypeptide chain containing 155 amino acids and having a molecular mass of 17703 Dalton. The rIL-1a is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

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

Solubility:

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

Stability:

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

Amino acid sequence:

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

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Biological Activity:

The ED₅₀ as determined by the dose-dependent stimulation of D10S cells is < 0.03 ng/ml.

Protein content:

Protein quantification was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 0.669 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.

Usage:

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