



## Interleukin-1 alpha, rhesus macaque recombinant (rrmIL1A)

**Catalog No:** 99953  
**Lot No:** XXXXX  
**Source:** *E. 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

### Background

IL-1  $\alpha$  is produced by activated macrophages. It stimulates thymocyte proliferation by inducing IL-2 release, B-cell maturation and proliferation, and fibroblast growth factor activity. IL-1  $\alpha$  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 IL 1 alpha Rhesus Macaque, produced in *E. coli* cells, is a non-glycosylated homodimeric protein containing a 159 amino acid chain. It has a molecular mass of 18.1 kDa. The IL 1 alpha is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile filtered, white, lyophilized (freeze-dried) powder.

### Formulation

IL 1 alpha was lyophilized from a 0.2  $\mu$ m filtered concentrated solution in PBS (pH 7.4).

### Solubility

It is recommended to reconstitute the lyophilized IL 1 alpha recombinant in sterile 18 M $\Omega$ -cm H<sub>2</sub>O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

### Stability

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

### Amino Acid Sequence

SAPFSFLSNM TYHFIRIIKH EFILNDTLNQ TIIRANDQHL TAAAIHNLDE AVKFDMGAYT SSKDDTKVPV ILRISKTKLY  
VSAQDEDQPV LLKEMPEINK TITGSETNFL FFWETHGTKN YFISVAHPNL FIATKHDNWW CLAKGLPSIT DFQILENQA

### Activity

Fully biologically active when compared to standard. The ED50, as determined by a cell proliferation assay using murine D10S cells, is less than 10 pg/ml, corresponding to a specific activity of  $>1.0 \times 10^8$  IU/mg.

### Usage

**This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.**

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