IL1A
Recombinant Rat Interleukin-1 alpha

Catalog No.	CRI143A	**Quantity:**	2 µg
	CRI143B		10 µg
	CRI143C		1 mg

Alternate Names: Hematopoietin-1, Lymphocyte-activating factor (LAF), Endogenous Pyrogen (EP), Leukocyte Endogenous Mediator (LEM), Mononuclear Cell Factor (MCF), IL1, IL-1A, IL1F1.

Description: Recombinant Rat Interleukin-1 alpha (IL-1alpha) is a non-secreted proinflammatory cytokine produced mainly by activated macrophages, as well as neutrophils, epithelial cells, and endothelial cells. It possesses metabolic, physiological, haematopoietic activities, and plays one of the central roles in the regulation of the immune responses. Both IL-1alpha and IL-1beta binds to the same receptor and has similar but not identical biological properties. Recombinant rat IL-1 alpha contains 150 amino acids which is a single non-glycosylated polypeptide.

GeneID: 24493

Source: *E. coli*

Molecular Weight: Approximately 17.8 kDa, a single non-glycosylated polypeptide chain containing 156 amino acids.

Formulation: Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM Tris + 150 mM NaCl, pH 8.5.

Purity: > 97 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1EU/µg as determined by LAL method.

Biological Activity: The ED_{50} as determined by the dose-dependent stimulation of the proliferation of mouse D10S cells is < 0.005 ng/ml.

Specific Activity: 2×10^8 IU/mg.

Amino Acid Sequence: SAPHSFQNNL RYKLIRIVKQ EFIMNDSLNQ NIYVDMDRIH LKAASLNDLQ LEVKFDMYAY SSGGDDSKYP VTLKVSNTQL FVSAQGEDKP VLLKEIPETP KLITGSETDL IFFWEKINSK NYFTSAAFPE LLIATKEQSQ VHLARGLPSM IDFQIS

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/ml. Further dilutions should be made in appropriate buffered solutions.

Storage & Stability: This lyophilized preparation is stable at 2-4°C, but should be kept desiccated at -20°C for long term storage. Upon reconstitution, the preparation is stable for up to one week at 2 -4°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -80°C. **Avoid repeated freeze/thaw cycles.**

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