IL-1alpha Rat E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Rat
Other names: Hematopoietin-1, Lymphocyte-activating factor (LAF), Endogenous Pyrogen (EP), Leukocyte Endogenous Mediator (LEM), Mononuclear Cell Factor (MCF), Interleukin-1alpha

Cat. No.:

RBG30001A002	(2 µg)
RBG30001A010	(10 µg)
RBG30001A100	(100 µg)

Description

IL-1a is a non-secreted, proinflammatory cytokine produced in a variety of cells, including monocytes, tissue macrophages, keratinocytes, and other epithelial cells. Both IL-1a and IL-1b bind to the same receptor and have similar, if not identical, biological properties. These cytokines have a broad range of activities including the stimulation of thymocyte proliferation by inducing IL-2 release, B-cell maturation and proliferation, mitogenic FGF-like activity, and the release of prostaglandin and collagenase from synovial cells. However, whereas IL-1b is a secreted cytokine, IL-1a is predominantly a cell-associated cytokine. Recombinant Rat IL-1a is a 17.7 kDa protein containing 155 amino acid residues.

Research topic

Cytokines and chemokines and related molecules, Diabetology - Other Relevant Products, Immune Response, Infection and Inflammation, Neural tissue markers, Oncology, Transplantation

Amino Acid Sequence

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MAPHSFQNNL RYKLIRIVKQ EFIMNDSLNQ NIYVDMDRIH LKAASLNDLQ LEVKFDMYAY SSGGDSKYPV TLKVSNTQLF
VSAQGEDKPV LLKEIPETPK LITGSETDLI FFWEKINSKN YFTSAAFPEL LIATKEQSQV HLARGLPSMI DFQIS
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Source

E. coli

Purity

98%

Biological Activity

The ED_{50} as determined by the dose-dependent proliferation of murine D10S cells is 0.005 ng/ml, corresponding to a specific activity of 2×10^{8} units/mg.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Storage, Stability/Shelf Life

-20°C

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