
Mouse IL-1 alpha Recombinant Protein Carrier-Free

Catalog Number: 34-8011

Also Known As: Interleukin-1 alpha, IL1a

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Contents: Mouse IL-1 alpha Recombinant Protein Carrier-Free

REF **Catalog Number:** 34-8011

Concentration: 0.5 mg/mL

Handling Conditions: For best recovery, quick-spin vial prior to opening. Use in sterile environment.

Source: E. coli expressed amino acids Ser 115-Ser 270 of mouse IL-1 alpha accession # BC003727

Molecular Mass: The protein is not methionylated at the N-terminal. The DTT reduced and non-reduced protein migrate as 18 kDa polypeptides on SDS-PAGE.

Purity: > 98%, as determined by SDS-PAGE

Endotoxin Level: Less than 0.01 ng/ug cytokine as determined by the LAL assay.

Bioactivity: Measured by mouse D10S cell proliferation assay. The ED50 is 0.01 ng/mL, corresponding to a specific activity of 1.0 x 10⁸ Units/mg.

Formulation: Sterile liquid; 10 mM sodium phosphate, pH 7.2, 150 mM NaCl. 0.22 um filtered.



Temperature Limitation: Store at less than or equal to -70°C.



Batch Code: Refer to Vial



Use By: Refer to Vial

Description

Mouse IL-1 alpha, also called Lymphocyte Activating Factor (LAF), Endogenous Pyrogen (EP), Leukocyte Endogenous Mediator (LEM), and Mononuclear Cell Factor (MCF), is an ~17 kDa factor produced by a wide variety of cells, including macrophages, dendritic cells, T and B cells. IL-1 alpha is mostly cell-associated, with 23% amino acid homology with IL-1 beta. The immune regulatory role of IL-1 alpha is exerted on a wide range of cells including lymphocytes, epithelial cells and fibroblasts. In vivo, it induces hypotension, fever, and acute phase response.

Applications Reported

Recombinant mouse IL-1 α is biologically active.

Applications Tested

This reagent has been tested by sandwich ELISA using the anti-mouse IL-1 α ELISA pair (ALF-161/biotin-polyclonal) and in bioassays with an observed ED₅₀ of 10 pg/ml, corresponding to a specific activity of 1.0 x 10⁸ U/mg.

References

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Dinarelli CA. Interleukin-1, interleukin-1 receptors and interleukin-1 receptor antagonist. *Int Rev Immunol*. 1998;16(5-6):457-99.

Kilian PL, Kaffka KL, Stern AS, Woehle D, Benjamin WR, Dechiara TM, Gubler U, Farrar JJ, Mizel SB, Lomedico PT. Interleukin 1 alpha and interleukin 1 beta bind to the same receptor on T cells. *J Immunol*. 1986 Jun 15;136(12):4509-14.

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