


Mouse IL-1 α protein

Cat #: PRP1127

Size: 5 ug/20 ug/100 ug/1 mg

Product Information

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| | Product Name: Mouse IL-1 α protein | | |
| REF | Catalog Number: PRP1127 | LOT | Lot Number: Refer to product label |
| | Purity: > 98 % as determined by SDS-PAGE | | |
|  | Storage: Store at -20 °C | | Preparation method: <i>E. coli</i> |
| | Shipping: The product is shipped at ambient temperature. | | |

Background: IL-1 α is a member of the interleukin 1 cytokine family. Cytokines are proteinaceous signaling compounds that are major mediators of the immune response. They control many different cellular functions including proliferation, differentiation, and cell survival/apoptosis but are also involved in several pathophysiological processes including viral infections and autoimmune diseases. Cytokines are synthesized under various stimuli by a variety of cells of both the innate (monocytes, macrophages, dendritic cells) and adaptive (T- and B-cells) immune systems. IL-1 α is a pleiotropic cytokine involved in various immune responses, inflammatory processes, and hematopoiesis. It is produced by monocytes and macrophages as a proprotein, which is proteolytically processed and released in response to cell injury, and thus induces apoptosis. IL-1 α stimulates thymocyte proliferation by inducing IL-2 release, B-cell maturation and proliferation, and fibroblast growth factor activity.

Sequence: Amino acid sequence derived from Mouse IL-1 α protein (NP034684.2) (Ser 115-Ser 270) was expressed.

Protein length: The recombinant Mouse IL-1 α protein consists of 156 amino acids and has a predicted molecular mass of 18 kDa.

Biological Activity: ① Immobilized Mouse IL-1 α protein at 1 μ g/mL (100 μ l/well) can bind Mouse IL1R1, The EC50 of mouse IL1R1 is 1.562 μ g/mL; ② Measured in a proliferation assay using CTLL-2 Mouse T lymphocytes cell. The ED50 for this effect is 1.64 μ g/mL, corresponding to a specific activity is 6.098 \times 10⁸ units/mg.

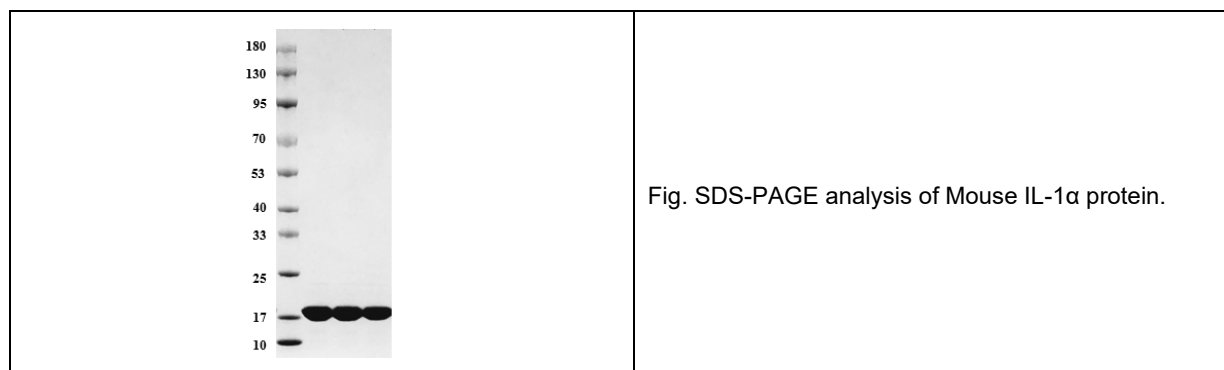
Endotoxin: < 0.01 EU per μ g of the protein as determined by the LAL method.

Formulation: Lyophilized from sterile 20 mM Tris with 150 mM NaCl, pH 7.4.

Storage Instructions: Lyophilized Mouse IL-1 α protein product should be stored desiccated below -20°C. Upon

reconstitution, the protein should be stored at 4°C between 2-7 days and for future use below -20°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Usage notes: Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized Mouse IL-1 α protein using the buffer we provided not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.



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