

Il1a

Recombinant Mouse Interleukin-1 alpha

Catalog No.	CRI138A	Quantity:	2 µg
	CRI138B		10 µg
	CRI138C		1.0 mg

Alternate Names: IL-1a

Description: Interleukin-1 alpha (IL-1alpha) is a non-secreted proinflammatory cytokine produced in a variety of cells including monocytes, tissue macrophages, keratinocytes and other epithelial cells. Both IL-1alpha and IL-1beta binds to the same receptor and has similar if not identical biological properties. These cytokines have a broad range of activities including, stimulation of thymocyte proliferation, by inducing IL-2 release, B-cell maturation and proliferation, mitogenic FGF-like activity and the ability to stimulate the release of prostaglandin and collagenase from synovial cells. However, whereas IL-1beta is a secreted cytokine, IL-1alpha is predominantly a cell-associated cytokine. IL-1 α and the independently regulated IL-1 β protein have overlapping proinflammatory activities to induce adhesion molecule expression on epithelial cells, control fever induction, initiate rheumatoid arthritis, and promote septic shock.

UniProt ID: P01582

Gene ID: 16175

Source: *E. coli*

Molecular Weight: 18.1 kDa (157 aa) monomer

Formulation: Lyophilized from sterile filtered 10 mM sodium phosphate, pH 7.5.

Purity: $\geq 95\%$ by reducing and non-reducing SDS-PAGE

Endotoxin Level: ≤ 1 EU/µg as determined by kinetic LAL method.

Biological Activity: ED₅₀ ≤ 10 pg/ml as determined by the dose-dependent, induced proliferation of the D10.G4.1 cell line.

Specific Activity: $\geq 1.0 \times 10^8$ units/mg.

Amino Acid Sequence: MSAPYTYQSD LRYKLMKLV RQKFMNDSL NQTIYQDV DKLH YLSTTWLNDL
 QQEVKFD MYA YSSGGDD SKY PVT LKISDSQ L FVSAQGEDQ PVLLKELPET
 PKLITGSETD LIFFWKSINS KNYFTSAAYP ELFIATKEQS RVHLARG LPS M TDFQIS

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial. **DO NOT VORTEX.** Allow several minutes for complete reconstitution.

Storage & Stability:

Store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, prepare working aliquots and store at -20°C to -80°C. It is recommended that a carrier protein such as 0.1% HSA or BSA is added for long term storage.

Avoid repeated freeze-thaw cycles.

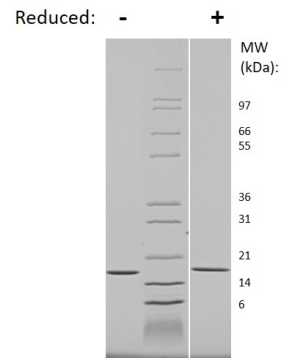
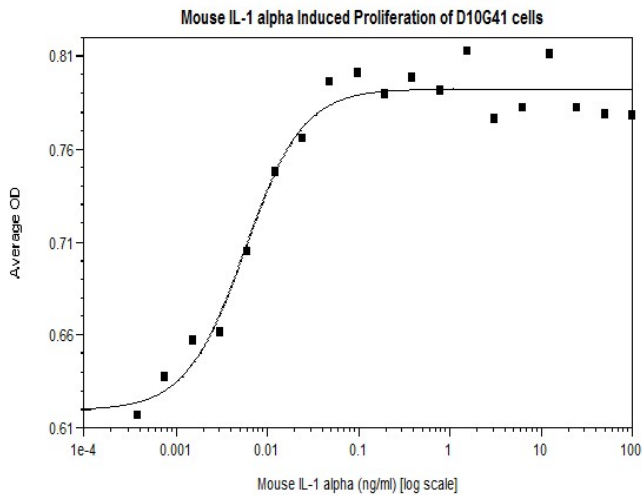
**Mouse IL-1 alpha Gel**

Figure: 1 ug run under (-) non-reducing and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Mouse IL-1 alpha is predicted to have a MW of 18.1 kDa.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

