

Active Recombinant Mouse Il1a Protein (Ser115-Ser270), C-His tagged, Animal-free, Carrier-free

Cat. No. Il1a-54M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse Il1a Protein (Ser115-Ser270) with C-His tag was expressed in E. coli and Animal-free as well as Carrier-free.
Species	Mouse
Source	E.coli
ProteinLength	Ser115-Ser270
Description	Interleukin-1 alpha (IL1 alpha or IL1 α) is a member of the interleukin-1 cytokine family, found constitutively present in epithelial layers of the entire gastrointestinal tract, lung, liver, kidney, endothelial cells, and astrocytes. The synthesized IL-1 alpha is a 31 kDa inactive precursor and can be cleaved by intracellular caspase-1 or extracellular proteases to generate the bioactive 17 kDa form and the 16 kDa N-terminal cleavage product. Both precursor and mature IL-1 alpha protein bind to the IL-1 receptor (IL-1R), initiating a cascade of inflammatory cytokines and chemokines production such as IL-6, IL-8, and TNF, in response to viral and bacterial pathogens conditions. IL-1 alpha plays a central role in immune-surveillance mechanisms, stimulating macrophages, neutrophils, and CD8+ T cells activity.
Form	Lyophilized
Bio-activity	Measure by its ability to induce D10.G4.1 cells proliferation. The ED50 for this effect is < 5 pg/mL. The specific activity of recombinant mouse IL-1 alpha is > 2 ×

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	10 ⁸ IU/mg.
Molecular Mass	The protein has a calculated MW of 18.93 kDa. The protein migrates as 20 kDa under reducing condition (SDS-PAGE analysis).
Endotoxin	< 0.1 EU/μg of the protein by the LAL method.
Purity	>95% as determined by SDS-PAGE analysis.
Storage	This product is stable after storage at: -20 centigrade for 12 months in lyophilized state from date of receipt. -20 or -80 centigrade for 1 month under sterile conditions after reconstitution. Avoid repeated freeze/thaw cycles.
Storage Buffer	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile H ₂ O to a concentration not less than 200 μg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.
Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at -20 centigrade or lower for long term storage.

GENE INFORMATION

Gene Name	Il1a interleukin 1 alpha [Mus musculus (house mouse)]
Official Symbol	Il1a
Synonyms	IL1A; interleukin 1 alpha; interleukin-1 alpha; IL-1 alpha; Il-1a;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA



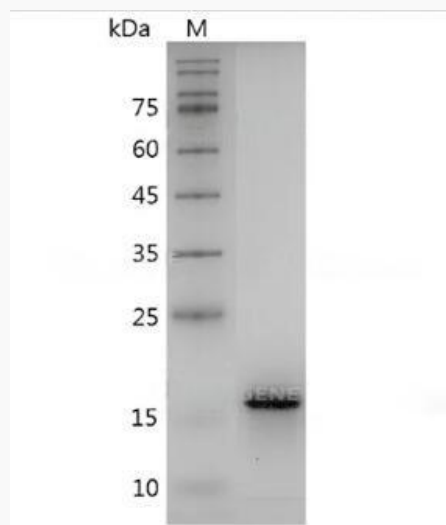
Gene ID 16175

mRNA Refseq NM_010554

Protein Refseq NP_034684

UniProt ID P01582

SDS-PAGE analysis
of recombinant
mouse IL-1 alpha.



Tel: 1-631-559-9269 1-516-512-3133

Email: info@creative-biomart.com Fax: 1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA