# Mouse IL-1 alpha/IL-1A Protein

Cat. No. IL1-MM10A



Description	
Source	Recombinant Mouse IL-1 alpha/IL-1A Protein is expressed from HEK293 with His tag at the C-terminus.
	It contains Ser115-Ser270.
Accession	P01582
Molecular Weight	The protein has a predicted MW of 19.08 kDa. Due to glycosylation, the protein migrates to 24-30 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

### Formulation and Storage

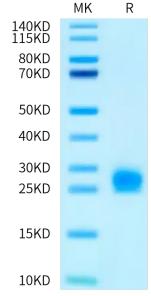
Formulation	Lyophilized from 0.22 $\mu$ m filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt80°C for 3 months after reconstitution.Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

# Background

The interleukin (IL)-1 family of cytokines is currently comprised of 11 members that have pleiotropic functions in inflammation and cancer. IL-1 $\alpha$  and IL-1 $\beta$  were the first members of the IL-1 family to be described, and both signal via the same receptor, IL-1R. Over the last decade, much progress has been made in our understanding of biogenesis of IL-1 $\beta$  and its functions in human diseases.

### **Assay Data**

# **Bis-Tris PAGE**

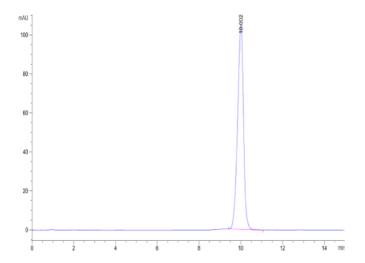


Mouse IL-1 alpha on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

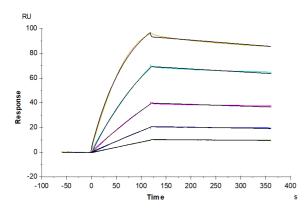


# **Assay Data**



The purity of Mouse IL-1 alpha is greater than 95% as determined by SEC-HPLC.

### **SPR Data**



Mouse IL-1R1, His Tag immobilized on CM5 Chip can bind Mouse IL-1 alpha, His Tag with an affinity constant of 51.22 nM as determined in SPR assay (Biacore T200).