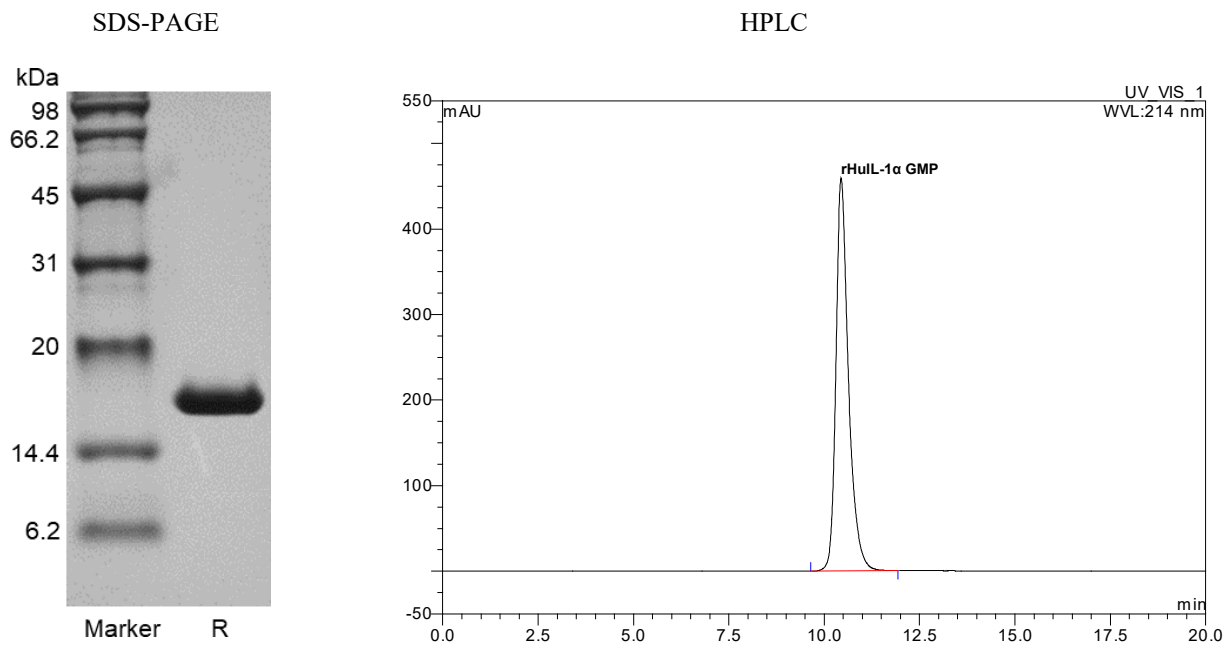


Catalog Number:	GMP-101-01A
Source:	<i>Escherichia coli</i>
Molecular Weight:	Approximately 18.0 kDa, a single non-glycosylated polypeptide chain containing 159 amino acids.
Size:	5 μ g/100 μ g/1 mg
Sequence:	SAPFSFLSNV KYNFMRIIKY EFILNDALNQ SIIRANDQYL TAAALHNLDE AVKFDMGAYK SSKDDAKITV ILRISKTQLY VTAQDEDQPV LLKEMPEIPK TITGSETNLL FFWETHGTKN YFTSVAHPNL FIATKQDYWV CLAGGPPSIT DFQILENQA
Purity:	> 98% by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using murine D10S cells is less than 1.0 pg/mL, corresponding to a specific activity of > 1.0 \times 10 ⁹ U/mg.
Physical Appearance:	Sterile filtered white lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 μ m filtered concentrated solution in 25 mM Tris-HCl, 3 mM β -Me and 5% Trehalose, pH 8.0.
Endotoxin:	Less than 0.01 EU/ μ g of rHuIL-1 α GMP as determined by LAL method.
Reconstitution:	Prior to opening, it is recommended to centrifuge the vial briefly to bring the contents down the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. If animal-origin-free condition is expected in your product, then sterile distilled water is recommended. Stock solutions should be apportioned into working aliquots and stored at \leq -20 $^{\circ}$ C. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● A minimum of 12 months from date of receipt, when stored at \leq -20 $^{\circ}$C as supplied.● 1 month, 2 to 8 $^{\circ}$C under sterile conditions after reconstitution.● 3 months, -20 to -70 $^{\circ}$C under sterile conditions after reconstitution.● Refer to lot-specific CoA for the Expiry Date.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory, or further evaluation purposes. NOT FOR HUMAN USE.
Quality Statement:	The manufacturing and testing of these products comply with ICH Q7 guidelines.



Background:

Interleukin-1 alpha (IL-1 α) is a non-secreted proinflammatory cytokine produced mainly by activated macrophages, as well as neutrophils, epithelial cells, and endothelial cells. It possesses metabolic, physiological, hematopoietic activities, and plays one of the central roles in the regulation of the immune responses. Both IL-1 α and IL-1 β binds to the same receptor and has similar identical biological properties. Among various species, the amino acid sequence of mature IL-1 α is conserved 60% to 70% and human IL-1 has been found to be biologically active on murine cell lines. IL-1 α recently started to find effective application in cosmetic and dermatological formulations, which allow to significantly harmonizing derma architecture.

Rev. 06/13/2023 V.6