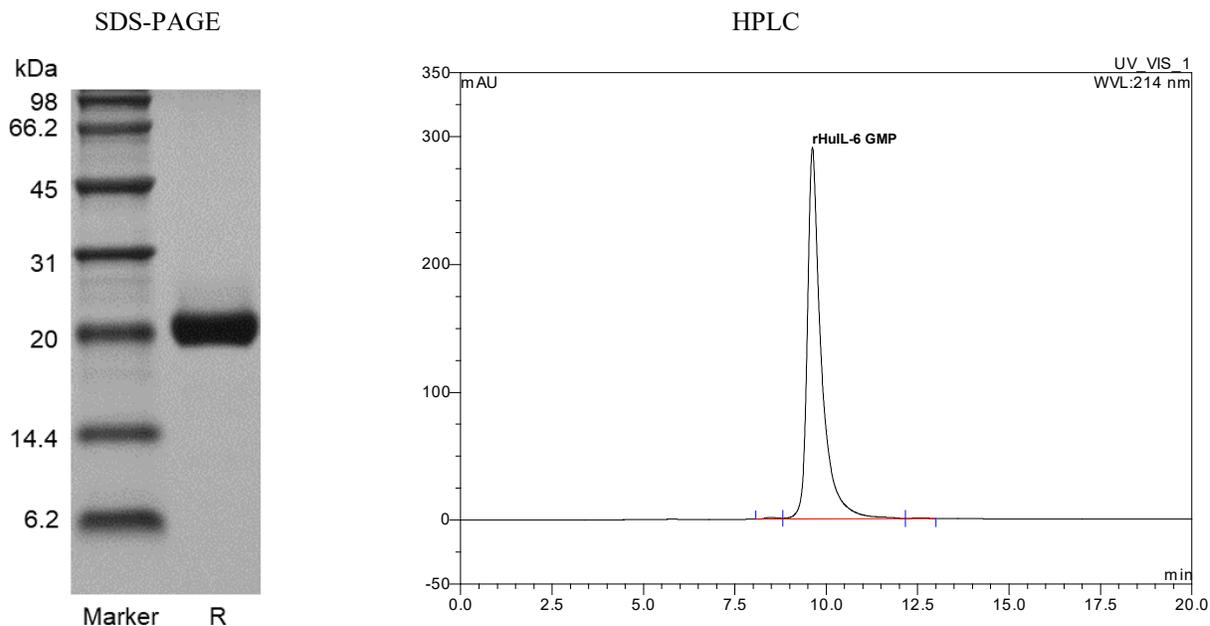


Catalog Number:	GMP-101-06
Source:	<i>Escherichia coli</i>
Molecular Weight:	Approximately 20.8 kDa, a single non-glycosylated polypeptide chain containing 183 amino acids.
Size:	5 µg/100 µg/1 mg
Sequence:	VPPGEDSKDV AAPHRQPLTS SERIDKQIRY ILDGISALRK ETCNKSNMCE SSKEALAENN LNLPKMAEKD GCFQSGFNEE TCLVKIITGL LEFEVYLEYL QNRFESSEEQ ARAVQMSTKV LIQFLQKKAK NLDAITTPDP TTNASLLTKL QAQNQWLQDM TTHLILRSFK EFLQSSLRAL RQM
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 TF-1 cells is less than 1.0 ng/mL. The specific activity of recombinant human IL-6 is > 1.0 × 10 ⁸ IU/mg, which is calibrated against rHuIL-6 WHO International Standard (NIBSC code: 21/308).
Physical Appearance:	Sterile filtered white lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM Tris-HCl, 150 mM NaCl, pH 8.0.
Endotoxin:	Less than 0.01 EU/µg of rHuIL-6 GMP as determined by LAL method.
Sterility:	Negative.
Mycoplasma:	Negative.
Host Cell Protein:	Less than 0.05% when tested by ELISA.
Host Cell DNA:	Less than 20 ng/mg when tested by qPCR.
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 ≤ -20 °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 ≤ -20 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °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-6 (IL-6) is an interleukin that in humans is encoded by the *IL6* gene and acts as both a pro-inflammatory and anti-inflammatory cytokine. It is secreted by T cells and macrophages to stimulate immune response. Furthermore, it plays an essential role in the final differentiation of B-cells into Ig-secreting cells involved in lymphocyte and monocyte differentiation. It also induces myeloma and plasmacytoma growth and induces nerve cells differentiation acts on B-cells, T-cells, hepatocytes, hematopoietic progenitor cells and cells of the CNS. The human IL-6 is a single non-glycosylated polypeptide chain containing 183 amino acids and it signals through a cell-surface type I cytokine receptor complex consisting of the ligand-binding IL-6R α chain (CD126), and the signal-transducing component gp130 (also called CD130). The human IL-6 shares about 40% a.a. sequence identity with mouse and rat IL-6 and it is equally active on mouse and rat cells.

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