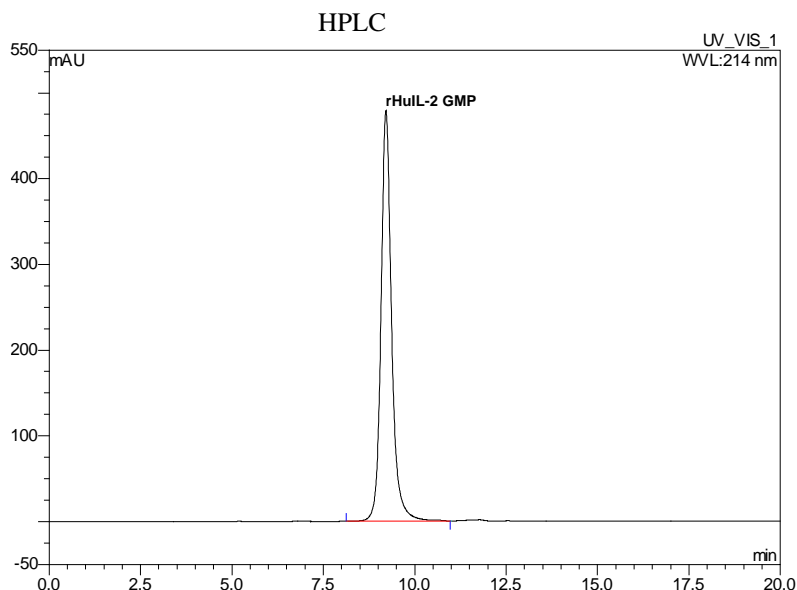
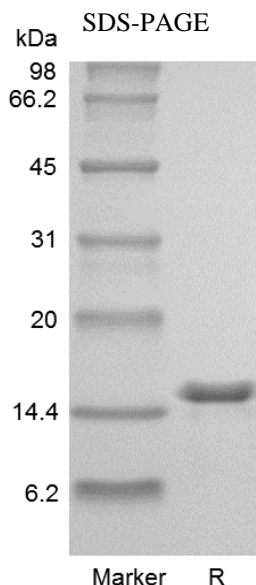


Catalog Number:	GMP-101-02
Source:	<i>Escherichia coli</i>
Molecular Weight:	Approximately 15.4 kDa, a single non-glycosylated polypeptide chain containing 133 amino acids.
Size:	5 µg/100 µg/1 mg
Sequence:	APTSSSTKKT QLQLEHLLLD LQMILNGINN YKNPKLTRML TFKFYMPKKA TELKHLQCLE EELKPLEEVL NLAQSKNFHL RPRDLISNIN VIVLELKGSE TTFMCEYADE TATIVEFLNR WITFCQSIIS TLT
Purity:	> 98% by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. Measured in a cell proliferation assay using CTLL-2 cells. The specific activity of recombinant human IL-2 is > 1.0 × 10 ⁷ IU/mg, which is calibrated against rHuIL-2 WHO International Standard (NIBSC code: 86/500).
Physical Appearance:	Sterile filtered white lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM PB, pH 3.5.
Endotoxin:	Less than 0.01 EU/µg of rHuIL-2 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.
In Vitro Virus Assay:	Negative.
Reconstitution:	Prior to opening, it is recommended to centrifuge the vial briefly to bring the contents down the bottom. Reconstitute in sterile distilled water 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. Do not reconstitute in cell culture media directly.
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:

IL-2 is a powerful immunoregulatory lymphokine produced by T-cells in response to antigenic or mitogenic stimulation. It is expressed by CD4⁺ and CD8⁺ T cells, $\gamma\delta$ T cells, B cells, dendritic cells, and eosinophils. IL-2/IL-2R signaling is required for T-cell proliferation and other fundamental functions which are essential for the immune response. The receptor for IL-2 consists of three subunits (55 kDa IL2R α , 75 kDa IL2R β , 64 kDa common gamma chain γ /IL2R γ) that are present on the cell surface in varying preformed complexes. Mature human IL-2 shares 56% and 66% amino acid sequence identity with mouse and rat IL-2, respectively. Human and mouse IL-2 exhibit cross-species activity.

Rev. 06/13/2023 V.7