## **PrimeGene** a biotechne brand

## Recombinant Human Interferon-Omega (rHuIFN-ω)

## **PrimeGene Technical Data Sheet**

Catalog Number:	106-09
Source:	Escherichia coli.
Molecular Weight:	Approximately 20.0 kDa, containing 172 amino acid residues with two conserved disulfide bonds.
Quantity:	20µg/100µg/1000µg
AA Sequence:	CDLPQNHGLL SRNTLVLLHQ MRRISPFLCL KDRRDFRFPQ EMVKGSQLQK
	AHVMSVLHEM LQQIFSLFHT ERSSAAWNMT LLDQLHTGLH QQLQHLETCL
	LQVVGEGESA GAISSPALTL RRYFQGIRVY LKEKKYSDCA WEVVRMEIMK
	SLFLSTNMQE RLRSKDRDLG SS
Purity:	> 97 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The $ED_{50}$ as determined by a chemotaxis
	bioassay using human TF-1 cells is less than 0.01 ng/ml, corresponding to a specific activity of $> 1.0$
	$ imes 10^8$ IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
Endotoxin:	Less than 1 EU/µg of rHuIFN- $\omega$ as determined by LAL method.
<b>Reconstitution:</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the
	bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a
	concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and
	stored at $\leq$ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
	• 12 months from date of receipt, -20 to -70 °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.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further
	evaluation purposes. NOT FOR HUMAN USE.

## Human Interferon-Omega

Interferon-Omega (IFN- $\omega$ ) coded by IFNW1 gene in human, is a number of the type I interferon family, which includes IFN- $\alpha$ , IFN- $\beta$ , and IFN- $\omega$ . The IFNAR-1/IFNAR-2 receptor complex can help with the signal transduction, followed the antiviral or the antiproliferative actions. IFN- $\omega$  is derived from IFN- $\alpha/\beta$  and share 75 % sequence with IFN- $\alpha$ . It has two intramolecular disulfide bonds which are crucial for activities. Mire-Sluis et al have described bioassays for IFN- $\alpha$ , IFN- $\beta$ , and IFN- $\omega$  that exploit the ability of these factors to inhibit proliferation of TF-1 cells induced by GM-CSF. The bioassays can be used also with Epo and TF-1 cells, or Epo and Epo-transfected UT-7 cells.

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