

Recombinant Human Interferon-Omega (rHuIFN-ω)

ChemWhat Technical Data Sheet (TDS)

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

 ${\tt LQVVGEGESA~GAISSPALTL~RRYFQGIRVY~LKEKKYSDCA~WEVVRMEIMK}$

SLFLSTNMQE RLRSKDRDLG SS

Purity:

> 97 % by SDS-PAGE and HPLC analyses.

Biological Activity:

Fully biologically active when compared to standard. The ED₅₀ 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

 \times 108 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-ω as determined by LAL method.

Reconstitution:

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 $\mathbb C$. 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:

ChemWhat Limited in UK offers this branded product for research, development or further

evaluation purposes. NOT FOR HUMAN USE.

Human Interferon-Omega

Interferon-Omega (IFN- ω) coded by IFNW1 gene in human, is a number of the type I interferon family, which includes IFN- α , IFN- β , and IFN- ω . The IFNAR-1/IFNAR-2 receptor complex can help with the signal transduction, followed the antiviral or the antiproliferative actions. IFN- ω is derived from IFN- α/β and share 75 % sequence with IFN- α . It has two intramolecular disulfide bonds which are crucial for activities. Mire-Sluis et al have described bioassays for IFN- α , IFN- β , and IFN- ω 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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