Recombinant Human Interferon-omega

#R00157

Size: 100 μg/500 μg

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.

Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

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.

AA Sequence

CDLPQNHGLLSRNTLVLLHQMRRISPFLCLKDRRDFR
FPQEMVKGSQLQKAHVMSVLHEMLQQIFSLFHTERS
SAAWNMTLLDQLHTGLHQQLQHLETCLLQVVGEGES
AGAISSPALTLRRYFQGIRVYLKEKKYSDCAWEVVRM
EIMKSLFLSTNMQERLRSKDRDLGSS

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 ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	Interferon alpha-II-1
Accession	P05000
GeneID	3467
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 20.0 kDa, containing 172 amino acid residues with two conserved disulfide bonds.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity	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 > 1.0×10^8 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-ω as determined by LAL method.