

Recombinant Human Interferon Omega-1 (rh IFN ω 1)

Synonyms: Interferon alpha-II-1

Introduction: IFN-Omega 1 is a type I interferon, that can be induced by virus-infected leukocytes. Type I interferon family members, which include IFN-alpha, IFN-beta, and IFN-omega, signal through IFNAR-1/IFNAR-2 receptor complex, and wield antiviral and antiproliferative activities. IFN ω 1 exhibits about 75% sequence homology with IFN-a, and contains 2 conserved disulfide bonds, which are essential for full biological activity.

Description: Human recombinant IFN ω 1 produced in E.coli is a single, non-glycosylated, polypeptide chain containing 172 amino acids and having a molecular mass of 19.9kDa. The Interferon-Omega 1 is purified by proprietary chromatographic techniques.

Source: *Escherichia coli*

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.2 μ m filtered solution in PBS pH-7.4
The samples of 1 μ g contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized IFN ω 1 in sterile H₂O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized IFN ω 1 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IFN ω 1 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

Purity: Greater than 95.0% as determined by HPLC and SDS-PAGE.

Amino Acid Sequence: MCDLPQNHGL LSRNTLVLLH QMRRISPFLC LKDRRDFRFP QEMVKGSQLQ
KAHVMSVLHE MLQQIFSLFH TERSSAAWNM TLLDQLHTGL HQQLQHLETG LLQVVGEGES AGAISSPALT
LRRYFQGIRV YLKEKKYSDC AWEVVRMEIM KSLFLSTNMQ ERLRSKDRDL GSS.

Biological Activity: Determined by a cytotoxicity assay using human TF-1 cells the ED₅₀ is \leq 0.01 ng/ml, corresponding to a specific activity of \geq 1 x 10⁸ IU/mg.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	20 μ g	Cat.N°	11344784
<i>medium</i>	100 μ g	Cat.N°	11344786

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