**Recombinant Human Interferon Omaga-1 (rh IFNW1)**

**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. IFNW1 exhibits about 75% sequence homology with IFN-a, and contains 2 conserved disulfide bonds, which are essential for full biological activity.

**Description:** Human recombinant IFNW1 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 0.2µm filtered solution in PBS pH-7.4
The samples of 1µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized IFNW1 in sterile H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized IFNW1 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IFNW1 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 TERSSAANM TLLDQLHTGL HQQLQHLET C LLQVVGEGES AGAISSPALT LRRYFQGIRV YLKEKKYSDC AWEVVRMEIM KSLFLSTNMQ ERLRSKDRDL GSS.

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

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<th>20 µg</th>
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<tr>
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