



Certificate of Analysis

Human Interferon Alpha 2 (Alpha 2b)

Catalog No: 11105-1

Lot No: 7502

Size: $\geq 1 \times 10^5$ units/vial

Description: Recombinant Human Interferon Alpha 2 (Alpha 2b) (Hu-IFN- α 2; Hu-IFN- α 2b)

Volume: 0.1 ml

Activity: 3.08×10^6 units/ml

Specific Activity: 3.08×10^8 units/mg

Buffer: Phosphate buffered saline (PBS) containing 0.1% bovine serum albumin (BSA)

Endotoxin: < 1 EU/ μ g

Molecular Weight: 19.3 kDa

Purity: $> 95\%$

Purification Method: A combination of ion exchange, hydrophobic interaction and size exclusion chromatography.

Source: Human leukocyte interferon cDNA expressed in *E. coli*

Human Gene: IFNA2

Synonyms: None

Accession #: V00548

Assay Used to Measure Bioactivity: Interferon was titrated with the use of the cytopathic effect inhibition assay as described [Rubinstein, S., Familletti, P.C., and Pestka, S. (1981) "Convenient Assay for Interferons," *J. Virol.* 37, 755-758; Familletti, P.C., Rubinstein, S., and Pestka, S. (1981) "A Convenient and Rapid Cytopathic Effect Inhibition Assay for Interferon," in *Methods in Enzymology*, Vol. 78 (S. Pestka, ed.), Academic Press, New York, 387-394]. In this antiviral assay for interferon about 1 unit/ml of interferon is the quantity necessary to produce a cytopathic effect of 50%. The units are determined with respect to the international reference standard for human interferon alpha A (Hu-IFN- α A) provided by the National Institutes of Health [see Pestka, S. (1986) "Interferon Standards and General Abbreviations," in *Methods in Enzymology* (S. Pestka, ed.), Academic Press, New York 119, 14-23]. Unit of activity measured on bovine MDBK cells with vesicular stomatitis virus (VSV).

Shipping Conditions: Dry Ice

Physical State of Product During Shipping: Frozen

Storage Conditions/Comments: After receipt, the product may be stored at -20°C for short-term use (≤ 6 months). For long-term storage, we recommend storing the product at -70°C or below for retention of full activity. When thawing, the contents of the tube should be apportioned in separate tubes so that freezing and thawing is kept to a minimum. Refreezing should be done on dry ice or in a dry ice/alcohol bath. Further dilution of the product should be in buffers containing protein such as 0.1% bovine serum albumin (BSA) or tissue culture media with serum. Dilution of material below 2×10^5 units/ml for freezing is not recommended. One freeze-thaw cycle is equivalent to thawing an aliquot prepared from the material received. [The activity measured after one freeze-thaw cycle is 3.56×10^6 units/ml (MDBK/VSV)]. For more information on protein handling, visit our Resource Library at www.pbl assaysci.com.

Authorization

Released by: _____

Date: April 19, 2022

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