



Certificate of Analysis

Human Interferon Alpha A (Alpha 2a), carrier-free

Catalog No: 11101-1

Lot No: 7268R

Size: 5 µg/vial

Description: Recombinant Human Interferon Alpha A (Alpha 2a), carrier-free (Hu-IFN-αA; Hu-IFN-α2a)

Volume: 0.1 ml

Concentration: 0.05 mg/ml

Specific Activity: 5.94 x 10⁸ units/mg

Buffer: Phosphate buffered saline (PBS)

Endotoxin: < 1 EU/µg

Molecular Weight: 19.2 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*

Accession #: V00549

Human Gene: IFNA2

Synonyms: None

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-αA) 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. Thaw product vial by incubation in cold tap water until just thawed – 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). For more information on protein handling, visit our Resource Library at www.pbl assaysci.com.

Authorization

Released by: _____

Date: March 1, 2021

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