**Certificate of Analysis** 

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

Catalog No: 11101-2

**Lot No:** 7191 **Size:** 20 μg/vial

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

Volume: 0.1 ml

Concentration: 0.2 mg/ml

**Specific Activity:** 5.05 x 10<sup>8</sup> 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, this product should be kept 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.pblassaysci.com.

**Authorization** 

Released by: Date: March 17, 2020

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