## **Certificate of Analysis**

**Human Interferon Alpha H2 (Alpha 14)** 

Catalog No: 11145-1

Lot No:

Size: 1 x 10<sup>5</sup> units/vial

Description: Recombinant Human Interferon Alpha H2 (Alpha 5) (Hu-IFN- H2; Hu-IFN- 14)

Volume: 0.1 ml

Activity: x 10 units/ml (MDBK/VSV)

Specific Activity: x 10 units/mg (MDBK/VSV)

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

Endotoxin: < 1 EU/ g Molecular Weight: 19.7 kDa

**Purity:** 55%

Purification Method: Purified from E. coli by a combination of ion exchange, hydrophobic interaction and size exclusion

chromatography

Source: cDNA obtained from human leukocyte mRNA expressed in E. coli

Human Gene: IFNA14 Synonyms: Hu-IFN- 14 Accession #: X02959

Assay Used to Measure Bioactivity: Interferon was titrated with the use of the cytopathic effect inhibition assay as listed

Bovine (MDBK/VSV). performed as described [Rubinstein, et al. (1981) J. Virol. 37(2):755]. The EC<sub>50</sub> for interferon in this assay is  $\sim$ 5 U/ml. Lot Activity was derived from multiple determinations in the above assay.

Human (A549/EMCV) . performed as described [Budd, et al. (1985) Canc. Chem. Pharm. 12:39]. The EC<sub>50</sub> for interferon in this assay is  $\sim 1$  U/ml. **Activity:** x 10 units/ml **Specific Activity:** x 10 units/mg

The units are determined by use of a Human IFN Alpha A (Hu-IFN- A [2a]) laboratory standard calibrated to the international reference standard for Human Interferon Alpha A (Hu-IFN- A [2a]) provided by the National Institutes of Health [Meager, et al (2001). J. Immunol. Meth. 257(1-2):17-33]. Please note that IFN assays vary between labs and assay systems [Meager, et al. (2001) J. Immunol. Meth. 257:17. Meager and Das (2005) J. Immunol. Meth. 306:1].

Shipping Conditions: Dry Ice

Physical State of Product During Shipping: Frozen

**Storage Conditions/Comments:** After receipt, the product may be stored at  $-20^{\circ}$ C for short-term use (m6 months). For long-term storage, we recommend storing the product at  $-70^{\circ}$ 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. Dilute for freezing of material below 2 x  $10^{5}$  units/ml 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 x  $10^{6}$  units/ml  $\frac{1}{10^{6}}$  Kpc more information on protein handling, visit our Resource Library at www.pblassaysci.com.

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Released by:	Date:
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