



## Certificate of Analysis

### Rat Interferon Alpha

**Catalog No:** 13100-1

**Lot No:** 7441

**Expiration:** August 31, 2024

**Size:** 2.4 x 10<sup>5</sup> units/vial

**Description:** Recombinant Rat Interferon Alpha (Rat IFN- $\alpha$ )

**Concentration:** 1.60 x 10<sup>6</sup> units/ml after reconstitution with 0.150 ml sterile distilled water

**Specific Activity:** 1 x 10<sup>8</sup> units/mg

**Buffer:** 0.15mL citric acid buffered saline (CBS pH 5.0) + 125mM trehalose prior to lyophilization

**Molecular Weight:** 19,000 Da

**Purity:** > 95%

**Source:** cDNA expressed in baculovirus

**Accession #:** X00336

**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%. As there is no international Rat IFN- $\alpha$  standard, units are determined with respect to the international reference standard for mouse interferon alpha/beta (mouse IFN- $\alpha/\beta$ ) 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]. Units of activity measured on rat epithelial-like (RATEC) cells with VSV in the presence of 2 mM glutathione.

**Shipping Conditions:** Wet Ice

**Physical State of Product During Shipping:** Lyophilized

**Storage Conditions/Comments:** Upon receipt, this product should be kept at -20°C while lyophilized, and at -70°C or below after reconstitution in sterile distilled water for retention of full activity. After reconstitution, the contents of the tube should be apportioned in separate tubes so that freezing and thawing is kept to a minimum. After thawing, this product is stable for at least four weeks at 4°C. Further dilute only 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](http://www.pblassaysci.com).

### Authorization

Released by: \_\_\_\_\_

Date: September 14, 2021

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