



Certificate of Analysis

Rat Interferon Alpha

Catalog No: 13100-1

Lot No: 7423

Expiration: July 31, 2022

Size: 1.3 x 10⁵ units/vial

Description: Recombinant Rat Interferon Alpha (Rat IFN- α)

Concentration: 8.67 x 10⁵ units/ml after reconstitution with 0.150 ml sterile distilled water

Specific Activity: 1 x 10⁸ 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- α standard, units are determined with respect to the international reference standard for mouse interferon alpha/beta (mouse IFN- α/β) 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.

Authorization

Released by: _____

Date: August 5, 2021

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