



Certificate of Analysis

Human Interferon Beta 1b, *E. coli*

Catalog No: 11420-1

Lot No: 7333

Size: $\geq 1 \times 10^5$ units/vial

Description: Recombinant Human Interferon Beta (Hu-IFN- β 1b). Serine replaces cysteine at residue 17

Volume: 0.100 ml

Activity: 3.62×10^6 units/ml (A549/EMCV)

Specific Activity: 1.81×10^7 units/mg (A549/EMCV)

Buffer: 153 mM NaCl, 1.3% Normal Serum Albumin

Endotoxin: < 1 EU/ μ g

Molecular Weight: 20,027 Da

Purity: $\geq 95\%$

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

Accession #: V00534

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

Human (A549/EMCV) – performed as described [Budd, *et al.* (1985) *Canc. Chem. Pharm.* 12:39]. 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 beta (Hu-IFN- 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].

Shipping Conditions: Dry Ice

Physical State of Product During Shipping: Frozen

Storage Conditions/Comments: After receipt, the product should be kept at -20°C 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.pblsaysci.com.

Authorization

Released by: _____

Date: February 24, 2021

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