



Certificate of Analysis

Human Interferon Beta 1a, mammalian

Catalog No: 11410-2

Lot No: 7413

Size: $\geq 1 \times 10^6$ units/vial

Description: Recombinant Human Interferon Beta 1a, mammalian (Hu-IFN- β 1a)

Volume: 0.1 ml

Activity: 3.44×10^7 units/ml

Specific Activity: 4.14×10^8 units/mg

Buffer: 10mM Acetic Acid

Endotoxin: <1 EU/ μ g

Molecular Weight: ~ 23 kDa

Purity: $> 95\%$, one N- linked glycosylation site

Purification Method: Proprietary chromatography methods

Source: Human fibroblast interferon cDNA expressed in CHO cells

Synonyms: Fibroblast interferon

Human Gene: IFNB1

Accession #: V00534

Assay Used to Measure Bioactivity: Interferon was titrated with the use of the cytopathic effect inhibition assay as described [Familletti, *et al.* (1981) "A Convenience and Rapid Cytopathic Effect Inhibition Assay for Interferon," in *Methods in Enzymology*, Vol. 78 (S. Pestka, ed.), Academic Press, New York, 387-394]. Encephalomyocarditis virus (EMCV) was used to challenge A549 cells [Budd, *et al.* (1985) *Canc. Chem. Pharm.* 12:39]. The activity was determined relative to a lab standard of Hu-IFN- β which was calibrated to the NIH Hu-IFN- β standard (Gb23-902-531). The EC_{50} for IFN is ~ 1 U/ml. Lot activity was derived from multiple determinations in the above assay. 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: Wet Ice

Physical State of Product During Shipping: Liquid

Storage Conditions/Comments: After receipt, this product should be kept at 2-8°C for retention of full activity. Further dilution of this product for long term storage is not recommended. For more information on protein handling, visit our Resource Library at www.pblassaysci.com.

Authorization

Released by: _____

Date: September 27, 2021

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