



## Certificate of Analysis

### Bovine Interferon Tau 2

**Catalog No:** 19616-1

**Lot No:**

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

**Description:** Recombinant Bovine Interferon Tau 2 (Bo-IFN- 2). Active on cow, sheep, human and mouse cells.

**Volume:** ml

**Concentration:** x 10 units/ml

**Specific Activity:** x 10 units/mg

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

**Endotoxin:** < 1 EU/ g

**Molecular Weight:** 20,027 Da

**Purity:** ~ 95%

**Source:** Bovine gene for interferon tau expressed in *mammalian cells*

**Accession #:** NP\_001015511

**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 not international Bo-IFN- standard, units are determined with respect to the international reference standard for human interferon alpha A (Hu-IFN- A) 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]. Unit of activity measured on bovine MDBK cells with vesicular stomatitis virus (VSV).

### References:

1. Klemann, *et al.* (1990) *Mol. Endocrin.* 4:1505-1514.
2. Alexenko, *et al.* (1997) *J. Int. Cyto. Res.* 17:769-779.

**Shipping Conditions:** Dry Ice

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

**Storage Conditions/Comments:** After receipt, the product may be stored at -20°C for short-term use (m6 months). For long-term storage, we recommend storing the product at -70°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. Over time, a portion of the carboxy terminal end may get clipped off, resulting in some protein of a molecular weight less than 20,000. Both the original bovine interferon tau and the clipped protein should maintain their biological activity. For more information on protein handling, visit our Resource Library at [www.pblassaysci.com](http://www.pblassaysci.com).

### Authorization

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

Date:

Sold under license from Pestka Biomedical Laboratories, Inc. d/b/a PBL Assay Science. For research use only. Not for diagnostic or clinical use in, or administration to, humans. Not for resale in original or any modified form, including inclusion in a kit, for any purpose. Not for use in the preparation of any commercial product.