**Product Information**

**Interferon β from rat recombinant, expressed in CHO cells**

Catalog Number I8907
Storage Temperature –70 °C

Synonym: IFN-β

**Product Description**

Recombinant, rat interferon β (IFN-β) is obtained from rat DNA expressed in CHO (Chinese Hamster Ovary) cells. It is reactive on mouse and rat cells, and has a molecular mass of ~20 kDa.

Type I Interferons are a closely related family of proteins, which induce a variety of effects on target cells including antiviral, antiproliferative, and immunomodulatory activities. They are divided into subtypes according to their cell type specific activities: α subtypes (leukocytes), β subtypes (fibroblasts), ω subtypes (lymphocytes), and τ subtypes (ruminant embryos).1

Interferon β is known to affect many important cell mediated immune responses, including enhanced expression of MHC molecules, β2-microglobulin, tumor associated antigens, and cytokine receptors for tumor necrosis factor, interleukin-1, interleukin-2, and colony stimulating factors.2

This product is lyophilized from phosphate buffered saline (PBS) with 125 mM trehalose.

Purity: ≥95%
Activity: ≥1 × 10^5 units/vial

Rat Interferon β activity is measured in a bioassay system for interferon β by the inhibition of cytopathic effect in rat epithelial-like (RATEC) cells with vesicular stomatitis virus (VSV).3-5 Since there is no international rat interferon β standard, units are determined with respect to the international reference standard for mouse interferon α/β provided by the National Institutes of Health (NIH). In this antiviral assay for interferon, ~1 unit/ml of interferon is the quantity necessary to produce a cytopathic effect of 50%. See CofA for lot-specific activity.

**Precautions and Disclaimer**

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

**Preparation Instructions**

Reconstitute the contents of the vial with 1 ml of sterile distilled water. After reconstitution, the concentration is 1 × 10^5 units/ml. If further dilutions are to be made, use buffers containing 0.1% bovine serum albumin.

**Storage/Stability**

Store the product at –70 °C or below for retention of full activity.

After reconstitution, freeze in working aliquots at –70 °C. Repeated freezing and thawing is not recommended and may cause significant loss of activity.

**References**


JR,KAA,MAM 11/10-1