Interferon β from mouse recombinant, expressed in *E. coli*

Catalog Number I9032
Storage Temperature –70 °C

Synonym: IFN β

**Product Description**
Type I Interferons are a closely related family of proteins that induce a variety of effects on target cells including antiviral, antiproliferative and immuno-modulatory 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).  

Interferon β (IFN 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.  

The recombinant Interferon β from mouse is obtained from mouse DNA expressed in *E. coli*. Its molecular mass is ~20 kDa.

The product is supplied as a solution in 20 mM HEPES, pH 6.0, 0.5 M NaCl, 6% glycerol, and 0.1% bovine serum albumin.

Purity: ≥95%

Interferon β activity is measured in a bioassay system against the NIH International Standard Reference for mouse interferon β by the inhibition of cytopathic effect in mouse L929 cells with encephalomyocarditis virus (EMCV). In this antiviral assay for interferon, –1 unit/ml of interferon is the quantity necessary to produce a cytopathic effect of 50%.

**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**
The contents of the vial may be further diluted in a buffer solution (phosphate buffered saline) containing a protein such as 0.1% bovine serum albumin.

**Storage/Stability**
The product ships on dry ice and storage at –70 °C or below is recommended for retention of full activity.

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

**References**

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