Technical Data Sheet

Recombinant Ovine Interferon-tau (rOv IFN-tau)

Ovine Interferon-tau

IFN-tau is a new class of type I IFN that is secreted by the trophoblast and is the signal for maternal recognition of pregnancy in sheep. IFN- tau has potent immunosuppressive and antiviral activities similar to other type I IFN but is less cytotoxic than IFN-α/β. The current investigation concerns the effect of recombinant ovine IFN-tau (rOvIFN- tau) on the modulation of MHC class I and II expression on cloned mouse cerebrovascular endothelial (CVE) cells. IFN- tau induced tyrosine phosphorylation of Stat1 and upregulated the expression of MHC class I on CVE. One proposed action by which type I IFN reduce the relapse rate in MS is via interference with IFN-γ-induced MHC class II expression. IFN- tau was shown to downregulate IFN-γ-induced MHC class II expression on CVE and, hence, may be of potential therapeutic value in downregulating inflammation in the central nervous system (CNS). IFN- tau did not upregulate the expression of MHC class II on CVE. IFN- tau also inhibited the replication of Theiler's virus in CVE.

Catalog Number:	RC277-18
Source:	*Saccharomyces cerevisiae*
Molecular Weight:	Approximately 20 kDa, a single non-glycosylated polypeptide chain containing 172 amino acids.
Quantity:	2ug/10ug/1mg
Purity:	>95% by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to IFN-alpha. The specific activity as determined in a viral resistance assay was found to be no less than 1.0×10^7 IU/mg.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2μm filtered concentrated (1mg/ml) solution in PBS, pH 7.4.
Endotoxin:	Less than 1EU/μg of rOvIFN-tau as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤-20°C. Further dilutions should be made in appropriate buffered solutions.
Storage:	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. **Avoid repeated**

freeze/thaw cycles.

Usage: This material is offered by Bio Basic Inc. for research, laboratory or further evaluation purposes. **NOT FOR HUMAN USE**.

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