

HB2205017

Recombinant Ovine Interferon-tau (Ovine IFN- τ)

Product Information

Product Name	Cat#	Size
Recombinant Ovine Interferon-tau (Ovine IFN- τ)	91217ES10	10 μ g
	91217ES60	100 μ g
	91217ES76	500 μ g

Product Description

IFN- τ 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- τ 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- τ) 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 up regulated 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- τ was shown to down regulate IFN- γ -induced MHC class II expression on CVE and, hence, may be of potential therapeutic value in down regulating inflammation in the central nervous system (CNS). IFN- τ did not upregulate the expression of MHC class II on CVE. IFN- τ also inhibited the replication of Theiler's virus in CVE.

Product Properties

Synonyms	Interferon tau-1; IFN-tau-1; Trophoblast antiluteolytic protein; Trophoblast protein 1
Accession	P56828
GeneID	100144750
Source	E.coli-derived ovine Interferon-tau protein, Cys24-Pro195
Molecular Weight	Approximately 19.9 kDa.
AA Sequence	CYLSRKLMLD ARENLKLLDR MNRLSPHSCL QDRKDFGLPQ EMVEGDQLQK DQAFPVLYEM LQQSFNLFYT EHSSAAWDTT LLEQLCTGLQ QQLDHLDTCR GQVMGEEDSE LGNMDPIVTV KKYFQGIYDY LQEKGYSDCA WEIVRVEMMR ALTVSTTLQK RLTKMGGDLN SP
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to IFN-alpha. The specific activity determined by a viral resistance assay is no less than 1.0×10^7 IU/mg.
Endotoxin	< 0.1 EU per 1 μ g of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.4. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
Reconstitution	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 $\leq -20^\circ\text{C}$. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only.