

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	166-07
Source:	<i>Yeast</i>
Molecular Weight:	Approximately 19.9 kDa, a single glycosylated polypeptide chain containing 172 amino acids.
Quantity:	2 μ g /10 μ g /1000 μ g
AA Sequence:	CYLSRKLMLD ARENLKLLDR MNRLSPHSCL QDRKDFGLPQ EMVEGDQLQK DQAFPVLYEM LQSQFNLFYT EHSSAAWDTT LLEQLCTGLQ QQLDHLDTCR GQVMGEEDSE LGNMDPIVTV KKYFQGIYDY LQEKGYSDCA WEIVRVEMMR ALTVSTTLQK RLTKMGGDLN SP
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.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.4.
Endotoxin:	Less than 0.1 EU/ μ g of rOvIFN- τ 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 $\leq -20^{\circ}\text{C}$. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70°C as supplied.● 1 month, 2 to 8°C under sterile conditions after reconstitution.● 3 months, -20 to -70°C under sterile conditions after reconstitution.
Usage:	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. NOT FOR HUMAN USE.

Ovine Interferon-tau

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.