

Rat Interferon tau - Purified

Alternate names:	IFN tau
Catalog No.:	PA1049
Quantity:	2 µg
Concentration:	1,0 mg/ml
Background:	<p>IFN-tau is also known as TP-1 (trophoblast protein-1) 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-alpha and IFN-beta. The current investigation concerns the effect of recombinant ovine IFN- tau (rOIFN- tau) on the modulation of MHC class I and II expression on cloned mouse cerebrovascular endothelial (CVE) cells.</p> <p>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 reduces 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.</p>
Species:	Rat
Source:	E. coli, Escherichia Coli
Format:	<p>State: Lyophilized purified protein (sterile filtered)</p> <p>Purity: >95% Greater than 95.0% as determined by both:</p> <p>(a) Analysis by RP-HPLC.</p> <p>(b) Analysis by SDS-PAGE.</p> <p>Buffer System: PBS pH-7.4</p> <p>Reconstitution: Restore in sterile 18Mohm-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions</p>
Description:	<p>Interferon-Tau Ovine Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 172 amino acids. The IFN-Tau is purified by proprietary chromatographic techniques.</p> <p>AA Sequence: The sequence of the first five N-terminal amino acids was determined and was found to be Cys-Tyr-Leu-Ser-Arg.</p> <p>Specific Activity: 1 x 10⁷ IU/mg</p> <p>Molecular weight: 17 kDa 19914.7 Dalton</p>
Add. Information:	<p>Protein quantitation was carried out by two independent methods:</p> <p>1. UV spectroscopy at 280 nm using the absorbency value of 1.027 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer</p>

analysis program of protein sequences (IntelliGenetics).

2. Analysis by RP-HPLC, using a calibrated solution of IFN-Tau as a Reference Standard.

Storage:

Prior to reconstitution stable at RT for 3 weeks.

Following reconstitution store the protein undiluted at 2-8°C for one week or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Shelf life: one year from despatch.