Interferon tau-1/IFNT1 Protein, Bovine (P.pastoris, His)

Cat. No.:	HY-P71798
Synonyms:	IFNT1; Interferon tau-1; IFN-tau-1; Antiluteolysin; Trophoblast antiluteolytic protein; Trophoblast protein 1; TP-1; Trophoblastin
Species:	Bovine
Source:	P. pastoris
Accession:	P15696 (24C-195L)
Gene ID:	317698
Molecular Weight:	Approximately 21.8 kDa

PROPERTIES

AA Sequence	C Y L S E D H M L G A R E N L R L L A R M N R L S P H P C L Q D R K D F G L P Q E M V E G N Q L Q K D Q A I S V L H E M L Q Q C F N L F Y T E H S S A A W N T T L L E Q L C T G L Q Q Q L E D L D A C L G P V M G E K D S D M G R M G P I L T V K K Y F Q G I H V Y L K E K E Y S D C A W E I I R V E M M R A L S S S T T L Q K R L R K M G G D L N S L
Appearance	Lyophilized powder.
Formulation	Lyophilized after extensive dialysis against solution in Tris-based buffer, 50% glycerol.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	Interferon tau-1 (IFNT1) serves as a paracrine hormone pivotal for initiating maternal recognition of pregnancy. Upon interaction with endometrial receptors, likely type I interferon receptors, IFNT1 plays a crucial role in blocking estrogen receptor expression, effectively impeding the estrogen-induced upregulation of oxytocin receptor expression in the endometrium. This mechanism results in the suppression of pulsatile endometrial release of the luteolytic hormone prostaglandin F2-alpha, thereby preventing the regression of the corpus luteum (luteolysis) and facilitating the maintenance of ovarian cyclicity. Additionally, IFNT1, possibly through a direct impact on prostaglandin synthesis, sustains ovarian progesterone secretion, stimulating the endometrial secretion of nutrients necessary for conceptus growth. Notably, IFNT1 exhibits exceptional antiviral and antiproliferative potency, coupled with low cytotoxicity, high antiluteolytic

	activity, and immunomodulatory properties. A distinctive feature is its lack of virally inducibility in contrast to other interferons.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA