Data Sheet (Cat.No.TMPH-00278)

TargetMol

Interferon tau-1/IFNT1 Protein, Bovine, Recombinant (E. coli, His)

General Information

Synonyms:	Trophoblastin;IFNT1;IFN-tau-1;Interferon tau-1;Trophoblast protein 1 (TP-1);Antiluteolysin; Trophoblast antiluteolytic protein
Protein Construction:	24-195 aa
Species:	Bovine
Expression Host:	E. coli
Accession:	P15696
Molecular Weight:	23.8 kDa (predicted)
AA Sequence:	CYLSEDHMLGARENLRLLARMNRLSPHPCLQDRKDFGLPQEMVEGNQLQKDQAISVLHEMLQQCFNLFYTE HSSAAWNTTLLEQLCTGLQQQLEDLDACLGPVMGEKDSDMGRMGPILTVKKYFQGIHVYLKEKEYSDCAWEI IRVEMMRALSSSTTLQKRLRKMGGDLNSL

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90% as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Tris-based buffer, 50% glycerol

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Paracrine hormone primarily responsible for maternal recognition of pregnancy. Interacts with endometrial receptors, probably type I interferon receptors, and blocks estrogen receptor expression, preventing the estrogen-induced increase in oxytocin receptor expression in the endometrium. This results in the suppression of the pulsatile endometrial release of the luteolytic hormone prostaglandin F2-alpha, hindering the regression of the

corpus luteum (luteolysis) and therefore a return to ovarian cyclicity. This, and a possible direct effect of IFN-tau on prostaglandin synthesis, leads in turn to continued ovarian progesterone secretion, which stimulates the secretion by the endometrium of the nutrients required for the growth of the conceptus. In summary, displays particularly high antiviral and antiproliferative potency concurrently with particular weak cytotoxicity, high antiluteolytic activity and immunomodulatory properties. In contrast with other IFNs, IFN-tau is not virally inducible.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481