
Product Data Sheet

Product Name: TFF3 Human
Cat. No.: GP20939
Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped at Room temp.
Synonyms	TFF-3; ITF; TFI; HITF; hP1.B; TFF3; Trefoil factor 3; Intestinal trefoil factor.		
Amino Acid Sequence	EEYVGLSANQ CAVPAKDRVD CGYPHVTPKE CNNRGCCFDS RIPGVPWC FKPLQEAECTF.		
Solubility	It is recommended to reconstitute the lyophilized TFF3 in sterile 18M-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.		
Formulation	Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4.		

Introduction

Proteins of the TFF family are characterized by obtaining a minimum of 1 copy of the trefoil motif, a 40-amino acid domain that contains 3 conserved disulfides. Trefoil Factors are stable secretory proteins expressed in gastrointestinal mucosa which protect the mucosa from insults, stabilize the mucus layer and affect healing of the epithelium. TFF2 inhibits gastric acid motility & secretion. TFF2 stabilizes glycoproteins in the mucus gel through interactions with carbohydrate side chains. TFF3 induces ciliogenesis and promotes airway epithelial ciliated cell differentiation, relatively through an epidermal growth factor receptor-dependent pathway. TFF3 overexpression is crucial for progression in mouse and human hepatocellular carcinogenesis. TFF-3 is normally expressed in hepatocellular carcinoma and its expression associates with tumor grade.

Biological Activity

The ED50 as determined by a chemotaxis bioassay using human MCF-7 cells is less than 10µg/ml, corresponding to a specific activity of > 100IU/mg.

Stability

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Lyophilized TFF3 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C . Upon reconstitution TFF3 should be stored at 4°C between 2-7 days and for future use below -18°C . For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Background

TFF-3 Human Recombinant produced in E.Coli is a homodimeric, non-glycosylated, polypeptide chain containing 2 x 59 amino acid chains which includes a 40 amino acid trefoil motif containing 3 conserved intermolecular disulfide bonds and having a total molecular mass of 13.2kDa. TFF-3 Human Recombinant is purified by proprietary chromatographic techniques.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA