

32-1760: TFF3 Recombinant Protein

Alternative Name : TFF-3,ITF,TFI,HITF,hP1.B,TFF3,Trefoil factor 3,Intestinal trefoil factor.

Description

Source : Escherichia Coli. 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. 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.

Product Info

Amount :	20 µg
Purification :	Greater than 97.0% as determined by RP-HPLC and SDS-PAGE analysis.
Content :	Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4.
Storage condition :	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.
Amino Acid :	EEYVGLSANQ CAVPAKDRVD CGYPHVTPE CNNRGCCFDS RIPGVPWCFK PLQEAECTF.

Application Note

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. 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.

