



Recombinant Human TFF-3

20230220DS



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	100-290
Size:	20 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	7033
Synonyms:	TFF3; ITF; P1B; TFI

The Trefoil Factor peptides (TFF1, TFF2 and TFF3) are secreted in the gastrointestinal tract, and appear to play an important role in intestinal mucosal defense and repair. TFF-3 is expressed by goblet cells and in the uterus, and has also been shown to express in certain cancers, including colorectal, hepatocellular, and in biliary tumors. TFF3 may be useful as a molecular marker for certain types of cancer, but its role, if any, in tumorigenesis is unknown. TFF3 also promotes airway epithelial cell migration and differentiation. Recombinant human TFF3 is a 13.2 kDa homodimeric protein consisting of two 59 amino acid chains, which includes a 40-amino acid trefoil motif containing three conserved intramolecular disulfide bonds.

Sequence

EEYVGLSANQ CAVPAKDRVD CGYPHVTPKE CNNRGCCFDS
RIPGVPWCFK PLQEAECTF

Database References

Protein RefSeq:	NP_0031217.3
Uniprot ID:	Q07654
mRNA RefSeq:	NM_003226

Product Specifications

Expressed in	E. coli
Purity	> 98% by SDS-PAGE & HPLC analyses
Structural Information	homodimer
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	lyophilized
Length (aa):	59
MW:	13.2 kDa

Stability: The lyophilized protein is stable at room temperature for 1 month and at 4°C for 6 months. Reconstituted working aliquots are stable for 1 week at 2°C to 8°C and for 3 months at -20°C to -80°C.

Reconstitution: Centrifuge vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. *Do not vortex.* This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.



AVOID REPEATED FREEZE AND THAW CYCLES!

Biological Activity: Determined by its ability to chemoattract human MCF-7 cells using a concentration range of 1.0-10.0 µg/ml.