

## TFF3

### Recombinant Human Trefoil Factor 3

Catalog No.	CRT189A	Quantity:	5 µg
	CRT189B		20 µg
	CRT189C		1.0 mg

**Alternate Names:** TFF-3, TFI, HITF, hP1.B, ITF, Intestinal Trefoil Factor

**Description:** Members of the Trefoil family are characterized by having at least one copy of the Trefoil motif, a 40-amino acid domain that contains three conserved disulfides. Trefoil Factors (TFF1, TFF2 and TFF3) are stable secretory proteins expressed in gastrointestinal mucosa. Their functions are not well-defined, but they may protect the mucosa from insults, stabilize the mucus layer and affect healing of the epithelium. Trefoil Factor 1 (TFF1) is essential for normal differentiation of the antral and pyloric gastric mucosa and functions as a gastric-specific tumor suppressor gene. Trefoil Factor 2 (TFF2) inhibits gastric acid motility and secretion. TFF2 stabilizes glycoproteins in the mucus gel through interactions with carbohydrate side chains. Trefoil Factor 3 (TFF3) is expressed in goblet cells of the intestines and colon. TFF3 induces ciliogenesis and promotes airway epithelial ciliated cell differentiation, relatively through an Epidermal Growth Factor Receptor (EGFR)-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. The three Trefoil Factor genes are found in a cluster on chromosome 21.

Recombinant Human TFF3 is a single, non-glycosylated polypeptide chain containing 69 amino acids (22-80 aa) which includes a 10 amino acid His Tag fused at N-terminus.

**Gene ID:** 7033

**Source:** *E.coli*

**Molecular Weight:** 7.82 kDa

**Formulation:** Lyophilized filtered solution containing 20 mM Tris pH 7.5 + 150 mM NaCl.

**Purity:** >95% by SDS-PAGE

**Amino Acid Sequence:** MKHHHHHHAS EEYVGLSANQ CAVPAKDRVD CGYPHVTPKE CNNRGCCFDS  
RIPGVPWCFFK PLQEAECTF

**Reconstitution:** **Centrifuge vial prior to opening.** Add deionized water to a working concentration approximately 0.5 mg/mL and let the lyophilized pellet dissolve completely.  
**PRODUCT IS NOT STERILE!** Please filter the product by appropriate sterile filter before using it in the cell culture.

**Storage & Stability:** Stable at room temperature for 3 weeks, best stored desiccated below -20°C. After reconstitution, store at 4°C no more than 1 week or -20°C for longer term. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).  
**Avoid repeated freeze-thaw cycles.**

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