



## RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet Recombinant Human Trefoil Factor-1 His Tag

**Catalog No.**  
228-11490

**Source:**  
*Escherichia coli*

### **Synonyms:**

TFF-1, TFF1, pS2, BCE1, HPS, HP1.A, pNR-2, D21S21, pS2 protein, Trefoil factor 1, Breast cancer estrogen-inducible protein.

### **Introduction:**

The Trefoil Factor peptides (TFF1, TFF2 and TFF3) are stable secretory proteins expressed in the gastrointestinal tract (gastric mucosa), and are involved in intestinal mucosal defense and repair. TFF1 is an essential protein for normal differentiation of the antral and pyloric gastric mucosa and functions as a gastric-specific tumor suppressor gene. TFF1 is a stabilizer of the mucous gel overlying the gastrointestinal mucosa that provides a physical barrier against various noxious agents. TFF1 protects the mucosa from insults, stabilizes the mucus layer, & affects healing of the epithelium. TFF1 is commonly expressed in tumors. TFF1 is related with the cell membrane of MCF-7 cells. High levels of TFF1 and TFF2 are found in serum from inflammatory bowel disease.

### **Description:**

TFF-1 Human Recombinant produced in *E.coli* is a single, non-glycosylated, polypeptide chain containing 70 amino acids (25-84) which includes a 10 amino acid His Tag and having a total molecular mass of 7.9 kDa.

TFF-1 Human Recombinant is purified by proprietary chromatographic techniques.

### **Physical Appearance:**

Filtered White lyophilized (freeze-dried) powder.

### **Formulation:**

The TFF1 His Tag protein was lyophilized from 0.4µm filtered solution at a concentration of 0.5mg/ml containing 20mM Tris pH-7.5 and 20mM NaCl.

### **Purity:**

Greater than 95.0% as determined by SDS-PAGE.

**The products are furnished for LABORATORY RESEARCH USE ONLY.  
Not for diagnostic or therapeutic use.**



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### ***Solubility:***

It is recommended to add deionized water to prepare a working stock solution of approximately 0.5mg/ml and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

### ***Stability:***

Lyophilized TFF1 His Tag although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TFF1 His Tag 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 sequence:***

MKHHHHHHAS EAQTETCTVA PRERQNCGFP GVTPSQCAN K GCCFDDTVRG VPWCFYPNTI  
DVPPEEECEF.

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