

# Recombinant Protein Technical Manual Recombinant Human Trefoil Factor 1/TFF1 Protein (His Tag) RPES4217

### **Product Data:**

**Product SKU:** RPES4217 **Size:** 10μg

Species: Human Cells

**Uniprot:** P04155

### **Protein Information:**

Molecular Mass: 7.5 kDa

AP Molecular Mass: 14 kDa

Tag: C-His

**Bio-activity:** 

**Purity:** > 95% as determined by reducing SDS-PAGE.

**Endotoxin:**  $< 1.0 \text{ EU per } \mu\text{g}$  as determined by the LAL method.

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room

temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** 

**Synonyms:** Trefoil factor 1; Breast cancer estrogen-inducible protein; PNR-2; Polypeptide P1.

A; hP1. A; Protein Ps2; TFF1; BCEI; PS2

# Immunogen Information:

Sequence: Glu25-Phe84

# Background:

Trefoil Factor 1 (TFF1) belongs to the three structurally related secreted proteins that contain trefoil domains. TFF1 is an approximately 7 kDa peptide that plays an important role in epithelial regeneration and wound healing. It is highly expressed in goblet cells of the gastric and intestinal mucosa and by conjunctival goblet cells. By conserving intrachain disulfide bonds, human TFF1 formed a three-leaved conformation held together. It is a copper-binding protein that can form disulfide-linked homodimers, associate into disulfide-linked complexes with Gastrokine 2, and form non-covalent complexes with the mucin MUC5AC. TFF1 is down-regulated during the progression from gastritis to gastric dysplasia to gastric cancer, although it is upregulated in breast and prostate cancers.