

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

**Catalog Number:** PKS033494

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

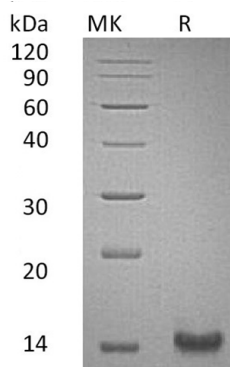
### Description

|                      |  |
|----------------------|--|
| <b>Species</b>       | Human  |
| <b>Source</b>        | HEK293 Cells-derived Human Trefoil Factor 1/TFF1 protein Glu25-Phe84, with an C-terminal His |
| <b>Calculated MW</b> | 7.5 kDa  |
| <b>Observed MW</b>   | 14 kDa   |
| <b>Accession</b>     | P04155   |
| <b>Bio-activity</b>  | Not validated for activity   |

### Properties

|                       |  |
|-----------------------|--|
| <b>Purity</b>         | > 95 % as determined by reducing SDS-PAGE.   |
| <b>Endotoxin</b>      | < 1.0 EU per µg of the protein as determined by the LAL method.  |
| <b>Storage</b>        | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.            |
| <b>Shipping</b>       | This product is provided as lyophilized powder which is shipped with ice packs.  |
| <b>Formulation</b>    | Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.<br>Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the printed manual. |
| <b>Reconstitution</b> | Please refer to the printed manual for detailed information.   |

### Data



> 95 % as determined by reducing SDS-PAGE.

### 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 Gastrin 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 up-regulated in breast and prostate cancers.

### For Research Use Only