

Recombinant Human Trefoil Factor 1

#R00537

Size: 5 µg/100 µg/500 µg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Trefoil factor 1 belongs to the trefoil factor family that consists of three members named TFF1, TFF2 and TFF3. They are characterized by having at least one copy of the trefoil motif, a 40-amino acid domain that contains three conserved disulfides. The TFFs are stable secretory proteins expressed highly in the gastrointestinal tract (gastric mucosa). TFF1 is an essential protein for normal differentiation of the antral and pyloric gastric mucosa and functions as a stabilizer of the mucous gel overlying the gastrointestinal mucosa that provides a physical barrier against various noxious agents. It is studied because of commonly expressed in tumors as well.

AA Sequence

EAQTETCTVAPRERQNCGFPGVTPSQCANKGCCFD
DTVRGVPWC FY PNTIDVPPEEECEF

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	Breast Cancer Estrogen-inducible Protein, PNR-2, Polypeptide P1.A (hP1.A), Protein pS2
Accession	P04155
GeneID	7031
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 13.2 kDa, a homodimer consisting of two 60 amino acid polypeptide chains, which includes a 40-amino acid trefoil motif containing three conserved intramolecular disulfide bonds.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
Biological	Fully biologically active when

Activity	compared to standard. The ED ₅₀ as determined by a chemotaxis bioassay using human MCF-7 cells is less than 10 µg/ml, corresponding to a specific activity of > 100 IU/mg.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM PB, pH 7.4, 150 mM NaCl.
Endotoxin	Less than 1 EU/µg of rHuTFF1 as determined by LAL method.
