

Recombinant Human Trefoil Factor 2

#R00538

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 2 encoded by the TFF2 gene in humans, 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). TFF2 can inhibit gastrointestinal motility and gastric acid secretion. Additionally, it functions as a structural component of gastric mucus, possibly by stabilizing glycoproteins in the mucus gel through interactions with carbohydrate side chains.

AA Sequence

EKSPQCQCSRLSPHNRTNCGFPGITSDQCFDNGCCF
DSSVTGVPWCFHPLPKQESDQCVMEVSDRRNCGYP
GISPEECASRKCCFSNFIFVWPWCFFPKSVEDCHY

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	Spasmolysin, Spasmolytic polypeptide, SP
Accession	Q03403
GeneID	7032
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 12.0 kDa, a single non-glycosylated polypeptide chain containing 106 amino acids, which includes a 40-amino acid trefoil motif containing three conserved intramolecular disulfide bonds.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a chemotaxis

bioassay using human MCF-7 cells is less than 10 ng/ml, corresponding to a specific activity of $> 1.0 \times 10^5$ IU/mg.

Physical Sterile Filtered White lyophilized

Appearance (freeze-dried) powder.

Formulation Lyophilized from a 0.2 μ m filtered concentrated solution in 20 mM PB, pH 7.4, 130 mM NaCl.

Endotoxin Less than 1 EU/ μ g of rHuTFF2 as determined by LAL method.
