

TFF-2, Human

Cat. No.: Z02809-1

Size: 1.0 mg

Synonyms: Trefoil Factor 2 (TFF-2), Human;

Description:

The Trefoil Factor peptides (TFF1, TFF2 and TFF3) are expressed in the gastrointestinal tract, and appear to play an important role in intestinal mucosal defense and repair. TFF2 has been shown to inhibit gastrointestinal motility and gastric acid secretion. Recent data suggests a potential role for TFF2 in acute and chronic asthma (Nikolaidis, N.M. et al. Am. Journal Respir. Cell Mol. Biol. (2003) 4: 458-464).

Amino Acid Sequence:

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00001 EKPSPCQCSR LSPHNRTNCG FPGITSDQCF DNGCCFDSSV  
00041 TGVVPWCFHPL PKQESDQCVV EVSDRRNCGY PGISPEECAS  
00081 RKCCFSNFIF EVPWCFPPKS VEDCHY
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Source: *E. coli*

Species: Human

Biological Activity: Fully biologically active when compared to standard. The ED₅₀ 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 × 10⁵ IU/mg.

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.

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

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

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.

Purity: > 97 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/μg of rHuTFF2 as determined by LAL method.

Storage: This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.