

TFF3, Human

Cat. No.: Z02904-20

Size: 20.0 ug

Synonyms: Trefoil Factor 3 Human; TFF3 Human

Description:

The Trefoil Factor peptides (TFF1, TFF2 and TFF3) are secreted in the gastrointestinal tract, and appear to play an important role in intestinal mucosal defense and repair. TFF-3 is expressed by goblet cells and in the uterus, and has also been shown to express in certain cancers, including colorectal, hepatocellular, and in biliary tumors. TFF3 may be useful as a molecular marker for certain types of cancer, but its role, if any, in tumorigenesis is unknown. TFF3 also promotes airway epithelial cell migration and differentiation.

Amino Acid Sequence:

00001 EEYVGLSANQ CAVPAKDRWD CGYPHVTPKE CNNRGCCFDS
00041 RIPGVVWCFK PLQEAECTF

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 µg/ml, corresponding to a specific activity of > 100 IU/mg.

Molecular Weight: Approximately 6.6 kDa, a single non-glycosylated polypeptide chain containing 59 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 PBS, pH 7.4.

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: > 95 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/µg of rHuTFF3 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.