

Recombinant Human Trefoil Factor-3 (rh TFF-3)

Synonyms: Spasmolytic polypeptide, Spasmolysin, SML1, SP.

Introduction: Proteins of the TFF family are characterized by obtaining a minimum of 1 copy of the trefoil motif, a 40-amino acid domain that contains 3 conserved disulfides. Trefoil Factors are stable secretory proteins expressed in gastrointestinal mucosa which protect the mucosa from insults, stabilize the mucus layer and affect healing of the epithelium. 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. TFF3 overexpression is crucial for progression in mouse and human hepatocellular carcinogenesis.

Description: Recombinant human Trefoil Factor-3 produced in E.Coli is a homodimeric, non-glycosylated, polypeptide chain containing 2 x 59 amino acid chains which includes a 40 amino acid trefoil motif containing 3 conserved intermolecular disulfide bonds and having a total molecular mass of 13.2kDa. Rh TFF-3 is purified by proprietary chromatographic techniques.

Source: Escherichia Coli

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4. The aliquots/samples of 1µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rh TFF-3 in sterile H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh TFF-3 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rh TFF-3 should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity: Greater than 97.0% as determined by RP-HPLC and by SDS-PAGE.

Amino Acid Sequence:

EEYVGLSANQ CAVPAKDRVD CGYPHVTPKE CNNRGCCFDS RIPGVPWC FK PLQEAECTF

Biological Activity: Determined by its ability to chemoattract human MCF-7 cells using a concentration 1.0-10.0 ng/ml.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	5 µg	Cat.N°	11344490
<i>medium</i>	20 µg	Cat.N°	11344494

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