

# **California Bioscience**

# **Product Datasheet**

Product Name	Trefoil Factor-2 Human Recombinant, His Tag
Cata No	CB501345
Source	Escherichia Coli.
Synonyms	TFF-2, Spasmolytic polypeptide, Spasmolysin, SML1, Trefoil factor 2, SP, TFF2.

## Description

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.TFF2 inhibits gastric acid motility & secretion. TFF2 stabilizes glycoproteins in the mucus gel through interactions with carbohydrate side chains. TFF-2 Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 116 amino acids (24-129) which includes a 10 amino acid His Tag fused at N-terminus and having a total molecular mass of 13.2 kDa. TFF2 Human Recombinant is purified by proprietary chromatographic techniques.

### **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

### Purity

Greater than 95.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

#### Formulation

The TFF2 protein was lyophilized from 0.4µm filtered solution at a concentration of 0.5mg/mL containing 20mM Tris pH-7.4, 20mM NaCl and 1xPBS.

#### Reconstitution

It is recommended to reconstitute the lyophilized TFF2 in sterile  $18M\Omega$ -cm H2O not less than  $100\mu$ g/ml, which can then be further diluted to other aqueous solutions.

#### Stability

Lyophilized TFF2 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TFF2 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.

### Sequence

**MKHHHHHAS** EKPSPCQCSR LSPHNRTNCG FPGITSDQCF DNGCCFDSSV TGVPWCFHPL PKQESDQCVM EVSDRRNCGY PGISPEECAS RKCCFSNFIF EVPWCFFPKSVEDCHY