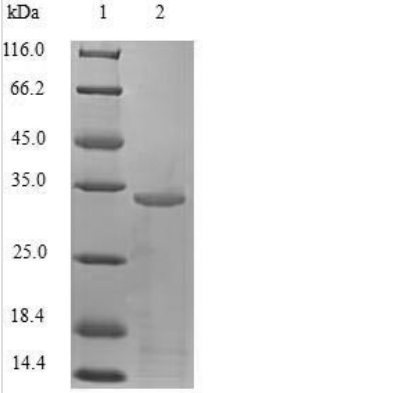
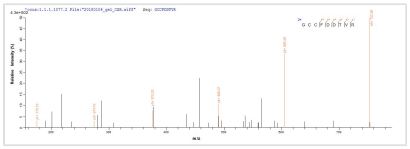
Recombinant Human Trefoil factor 1 (TFF1)

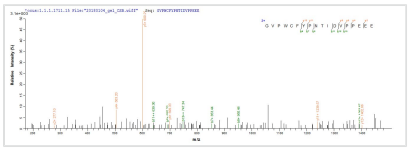
Product Code	CSB-EP023431HU
Relevance	Stabilizer of the mucous gel overlying the gastrointestinal mucosa that provides a physical barrier against various noxious agents. May inhibit the growth of calcium oxalate crystals in urine.
Abbreviation	Recombinant Human TFF1 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P04155
Alias	Breast cancer estrogen-inducible protein;PNR-2;Polypeptide P1.A ;hP1.AProtein pS2
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	EAQTETCTVAPRERQNCGFPGVTPSQCANKGCCFDDTVRGVPWCFYPNTID VPPEEECEF
Research Area	Signal Transduction
Source	E.coli
Target Names	TFF1
Expression Region	25-84aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal GST-tagged
Mol. Weight	33.7kDa
Protein Length	Full Length of Mature Protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP023431HU could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) TFF1.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP023431HU could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) TFF1.

Description

Amino acids 25-84 form the expressed segment for recombinant Human TFF1. This TFF1 protein is theoretically predicted to have a molecular weight of 33.7 kDa. The TFF1 protein was expressed in e.coli. The TFF1 coding gene included the N-terminal GST tag, which simplifies the detection and purification processes of the recombinant TFF1 protein in following stages of expression and purification.

Trefoil factor 1 (TFF1) is primarily expressed in the gastrointestinal tract, particularly in the stomach, where it plays a role in maintaining mucosal integrity and promoting the healing of damaged epithelia. TFF1 is involved in protecting the mucosa from various insults, such as acidic conditions and mechanical stress. TFF1 is associated with mucin glycoproteins and contributes to the formation of a protective mucous layer on the epithelial surfaces. Beyond its role in gastric mucosal protection, TFF1 has been implicated in diverse physiological and pathological processes, including wound healing, inflammation, and cancer. Research areas related to TFF1 encompass investigations into its molecular mechanisms, its involvement in gastrointestinal diseases, and its potential as a diagnostic or therapeutic target in cancer and other conditions affecting mucosal tissues. Understanding the functions of TFF1 provides insights into the complex interplay between mucosal defense mechanisms and various disease states.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.
Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.