Recombinant Human BCEI/PS2/TFF1 Protein

Catalog No.: RP01779

Sequence Information

Species
Human

Gene ID
7031

Swiss Prot
P04155

Tags
C-His

Synonyms
pS2; BCEI; HPS2; HP1.A; pNR-2; D21S21;TFF1

Product Information

Source
HEK293 cells

Purification
≥ 95 % as determined by SDS-PAGE.

Calculated MW
7.54 kDa

Observed MW
15 kDa

Endotoxin
< 0.1 EU/μg of the protein by LAL method.

Formulation
Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

Reconstitution
Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Background

Trefoil Factor 1 (TFF1), also known as pS2, is one of three structurally related secreted proteins that contain trefoil domains. These domains adopt a three-leaved conformation held together by conserved intrachain disulfide bonds. TFF1 is an approximately 7 kDa peptide that plays an important role in epithelial regeneration and wound healing (1). Mature human TFF1 shares 67% amino acid sequence identity with mouse and rat TFF1. It is expressed by goblet cells of the gastric and intestinal mucosa and by conjunctival goblet cells (2-5). TFF1 is a copper-binding protein that can form disulfide-linked homodimers, associate into disulfide-linked complexes with Gastrokine 2, and form non-covalent complexes with the mucin MUC5AC (4, 6-8). Copper enhances TFF1 homodimerization as well as its ability to promote epithelial cell motility, wound healing, and the colonization of H. pylori in stomach and colon epithelia (9, 10). TFF1 is down-regulated during the progression from gastritis to gastric dysplasia to gastric cancer, although it is up-regulated in breast and prostate cancers (11-13). TFF1 inhibits the formation of calcium oxalate crystals, and its excretion in the urine is reduced in patients with kidney stones (14).

Basic Information

Description
Recombinant Human BCEI/PS2/TFF1 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Glu25-Phe84) of human BCEI/PS2/TFF1 (Accession #NP_003216.1) fused with and a 6×His tag at the C-terminus.

Activity

Shipping
Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage
Store at -20℃

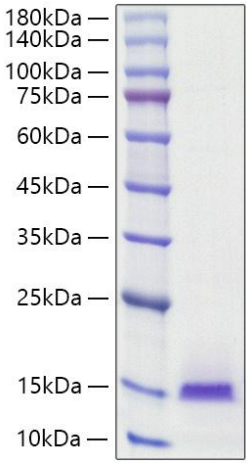
Operational Notes
For your safety and health, please wear a lab coat and disposable gloves for handling.

Contact

400-999-6126
cn.market@abclonal.com.cn
www.abclonal.com.cn

For research use only. Not for therapeutic or diagnostic purposes.
Please visit http://abclonal.com for a complete listing of recommended products.

Validation Data



Recombinant Human BCEI/PS2/TFF1 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.