

Product Specification Sheet

Trefoil factor 1 (Tff1; Bcei; Ps2) Antibodies

Cat # TFF12-P	Human TFF1 Control/Blocking Peptide	SIZE: 100 µg
Cat # TFF12-A	Rabbit anti-human TFF1 IgG (affinity pure)	SIZE: 100 µg

Minor disruption of the GI surface layer of the cells occurs frequently, such that maintaining epithelial integrity is of crucial importance. Normal epithelial repair requires restitution and regeneration. During restitution, within minutes after injury, epithelial cells spread and migrate across the basement membrane to re-establish surface cell continuity.

Trefoil factor family (TFF) proteins play an important role in restitution by influencing the migration of cells without promotion of proliferation or tumorigenesis. Regeneration occurs later on and involves proliferation and differentiation of epithelial cells and restoration of specialized elements. Three human TFFs have been identified to date: **TFF1** (formerly pS2) and **TFF3** (formerly hITF), with one trefoil domain each, and **TFF2** (formerly hSP), with two trefoil domains.

TFF1: rat: 81 aa; mouse: 84 aa; human: 87 aa – 9.67 kDa; Human chromosome: 21q22.3. Expressed in a number of carcinomas including breast (50%), pancreas (70-75%), stomach (50-55%), and large bowel (58%).

Source of Antigen, Antibodies

Antigen	16- aa peptide of Human TFF1 (Protein accession # Q08423 ; ref. 1); designated as TFF12-P control/blocking peptide conjugated to KLH
Epitope Location	~C-terminus
Antibody host/type	Rabbit, Polyclonal IgG (Cat # TFF12-A), purified over antigen-Agarose
Secondary Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
Negative Control Ab	Non-immune rabbit IgG (Cat # 20009-1) to be used as –ve control for ELISA, WB, IHC etc.

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG

100 µg/100ul solution lyophilized powder
Supplied in **Buffer:** PBS+0.1% BSA
Reconstitute powder in PBS at 1mg/ml

Control/blocking peptide

100 µg/100 ul solution lyophilized powder
Supplied in Buffer: PBS pH 7.5,
Reconstitute powder in PBS at 1 mg/ml.

Storage

Short-term: unopened, undiluted vials for less than a week at 4°C.

Long-term: at –20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20°C or below.

Shipping: 4°C for solutions and room temp for powder.

Recommended Usage

Western Blotting: 1-10 µg/ml; using affinity pure antibody (chemiluminescence technique).

ELISA: 1:100K; using 50-100 ng control peptide/well.

Histochemistry & Immunofluorescence: Not tested; we recommend the use of affinity purified antibody at 2-10 µg/ml.

Specificity & Cross-reactivity

Human TFF12-P peptide sequence has no sequence homology to rat or mouse TFF1 protein. We recommend using antibody Cat # TFF11-A against mouse TFF1 protein. Antibody cross-reactivity in various species is not known. The control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 µg control peptide per 1 µg of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (see detailed protocol at: [www.4adi.com\data/abblock.html](http://www.4adi.com/data/abblock.html)).

General References:

- (1) Carninci P, et al., (2005) Science 309: 1559-1563

List of related items, data sheets, and publications, using ADI antibodies is posted on the web site

*This product is for in vitro research use only.

Related material available from ADI

- Antibodies to human, mouse and rat TFF1, TFF2 and TFF3.

TFF12-A-P

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