

Product Specification Sheet

**Trefoil factor 2 (TFF2; SML1) Antibodies**

<b>Cat #</b> TFF22-P	Human TFF2 Control/Blocking Peptide	<b>SIZE:</b> 100 µg
<b>Cat #</b> TFF22-A	Rabbit anti-human TFF2 IgG # 2 (affinity pure)	<b>SIZE:</b> 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.

**TFF2:** rat, mouse, human: 129 aa each – 14.1 kDa; Human chromosome: 21q22.3. In normal gastric mucosa, TFF2 expression is observed in mucous glands of body and antrum. In duodenum, TFF2 expression is present in Brunner's glands acini and distal ducts. Some focal expression is also observed in duct epithelium of pancreas and in gall bladder epithelium.

**Source of Antigen, Antibodies**

<b>Antigen</b>	15- aa peptide of Human TFF2 (Protein accession # <b>Q03403</b> ; ref. 1); designated as TFF22-P control/blocking peptide conjugated to KLH
<b>Epitope Location</b>	~N-terminus
<b>Antibody host/type</b>	Rabbit, Polyclonal IgG (Cat # TFF22-A), purified over antigen-Agarose
<b>Secondary Ab</b>	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
<b>Negative Control Ab</b>	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 ug/100ul solution lyophilized powder  
Supplied in **Buffer:** PBS+0.1% BSA  
**Reconstitute powder** in PBS at 1mg/ml

**Control/blocking peptide**

100 ug/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 4oC.

**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 TFF22-P peptide sequence is 73% homologous to mouse and 86% homologous to rat TFF2 protein. We recommend using antibody Cat # TFF21-A against mouse TFF2 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 ug control peptide per 1 ug 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) The MGC Project Team (2004) Genome Res. 14: 2121-2127

**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 mouse, human and rat TFF1, TFF2 and TFF3.

TFF22-A-P

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