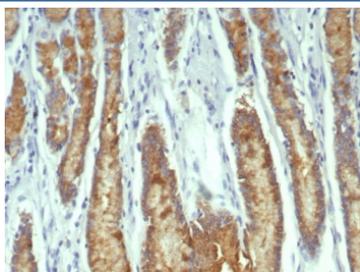


pS2 Antibody Clone TFF1/7767 / TFF1 Antibody [clone TFF1/7767] (V4379)

Catalog No.	Formulation	Size
V4379-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4379-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4379SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	TFF1/7767
Purity	Protein A/G affinity
UniProt	P04155
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
Limitations	This pS2 antibody is available for research use only.



pS2 Antibody Clone TFF1/7767. Immunohistochemistry analysis of Trefoil factor 1 (TFF1) in formalin-fixed, paraffin-embedded human stomach tissue using pS2 Antibody Clone TFF1/7767. Gastric epithelial cells show HRP-DAB brown cytoplasmic staining consistent with expression of the estrogen regulated secretory peptide TFF1 (pS2) in mucus-producing gastric glands. Hematoxylin counterstain highlights nuclei (blue). Antigen retrieval was performed by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min followed by cooling prior to immunohistochemistry staining.

Description

Trefoil factor 1 (TFF1) is a small secreted epithelial peptide encoded by the TFF1 gene and a member of the trefoil factor family involved in mucosal protection and epithelial repair within the gastrointestinal tract. The protein is strongly

expressed in mucus-secreting epithelial cells of the stomach, particularly within gastric foveolar epithelium where it contributes to stabilization of the protective mucin layer that lines the gastric mucosa. pS2 Antibody Clone TFF1/7767 recognizes Trefoil factor 1 protein and supports detection of TFF1 expression in epithelial tissues and experimental models used to study mucosal biology and epithelial differentiation. TFF1 antibody, also referred to as Trefoil factor 1 antibody or pS2 antibody in the literature, targets a protein widely used as a marker of gastric epithelial lineage and hormone-responsive epithelial tumors.

The protein was originally identified in breast carcinoma cells as the estrogen inducible secretory peptide pS2. Expression of TFF1 is closely associated with estrogen receptor signaling pathways and is frequently detected in hormone-responsive breast cancer cells. Because of this relationship, pS2 antibody detection has been widely used in studies examining estrogen-regulated gene expression and epithelial tumor biology. Expression of TFF1 in breast cancer cell lines such as MCF7 reflects the regulatory influence of estrogen signaling on secretory protein production within epithelial tumor cells.

In addition to its role in breast cancer biology, TFF1 plays an important physiological role in maintaining gastrointestinal epithelial integrity. The protein is secreted by gastric epithelial cells into the mucin layer where it interacts with mucins and other extracellular components to support the stability of the mucosal barrier. Trefoil factor peptides contain a conserved trefoil domain stabilized by disulfide bonds that allows them to remain structurally stable in the protease-rich environment of the gastrointestinal lumen. These structural properties enable TFF1 to participate in epithelial restitution processes that promote rapid repair of damaged mucosal surfaces following injury or inflammation.

TFF1 expression patterns are frequently examined in studies of epithelial differentiation and mucosal barrier biology. Strong expression is typically observed in gastric epithelial cells while expression in most other tissues is more limited. Alterations in TFF1 expression have also been investigated in studies of gastric tumorigenesis and epithelial transformation, highlighting the role of this trefoil family peptide in maintaining normal epithelial homeostasis.

pS2 Antibody Clone TFF1/7767 supports research examining Trefoil factor 1 expression in epithelial tissues and tumor cell models. Detection of TFF1 protein allows investigators to study gastric epithelial biology, mucosal barrier regulation, and estrogen regulated signaling pathways associated with epithelial tumor biology.

Application Notes

Optimal dilution of the pS2 Antibody Clone TFF1/7767 should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 1-84) from the human protein was used as the immunogen for the pS2 Antibody Clone TFF1/7767. Its epitope is located in the c-terminus of human pS2 protein.

Storage

Aliquot the pS2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Trefoil factor 1, TFF1, Breast cancer associated protein pS2, Trefoil factor family peptide 1, Trefoil factor peptide 1

