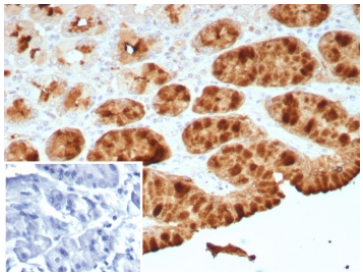
pS2 Antibody Recombinant Rabbit MAb TFF1/8755R C-Terminus / TFF1 C-Terminal Antibody [clone TFF1/8755R] (V4406)

Catalog No.	Formulation	Size
V4406-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4406-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4406SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	TFF1/8755R
Purity	Protein A/G affinity
UniProt	P04155
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This recombinant pS2 antibody is available for research use only.



pS2 Antibody Recombinant Rabbit MAb TFF1/8755R. Immunohistochemistry analysis of Trefoil factor 1 (TFF1) in formalin-fixed, paraffin-embedded human stomach tissue using pS2 Antibody Recombinant Rabbit MAb TFF1/8755R. Gastric epithelial cells show strong HRP-DAB brown cytoplasmic staining consistent with expression of the estrogen regulated secretory peptide TFF1 (pS2) in mucus-secreting 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. Inset: PBS was used in place of the primary antibody as a secondary antibody negative control.

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 covering the gastric mucosa. pS2 Antibody Recombinant Rabbit MAb TFF1/8755R C-Terminus recognizes Trefoil factor 1 protein and is designed to detect the C-terminal region of this secreted peptide. 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 differentiation and hormone-responsive epithelial tumors.

The C-terminal region of Trefoil factor 1 contains structural elements associated with the conserved trefoil peptide domain that characterizes members of the trefoil factor family. This region contains cysteine residues that contribute to formation of disulfide bonds, creating a compact structure that is resistant to proteolytic degradation within the gastrointestinal lumen. Antibodies recognizing the TFF1 C-terminus therefore bind to a region of the protein associated with structural stability and the characteristic trefoil peptide fold.

TFF1 was originally identified in breast carcinoma cells as the estrogen inducible secretory peptide pS2. Expression of this protein 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 investigating 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, Trefoil factor 1 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 participate in epithelial restitution processes that promote rapid repair of damaged mucosal surfaces following injury or inflammation.

pS2 Antibody Recombinant Rabbit MAb TFF1/8755R C-Terminus supports research examining Trefoil factor 1 expression and structure. Detection of the C-terminal region of TFF1 allows investigators to study this trefoil peptide in epithelial tissues, gastric mucosal biology, and hormone-responsive tumor models where pS2 expression reflects estrogen-regulated signaling pathways.

Application Notes

Optimal dilution of the pS2 Antibody Recombinant Rabbit MAb TFF1/8755R C-Terminus 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 Recombinant Rabbit MAb TFF1/8755R.

Storage

Aliquot the recombinant 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

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