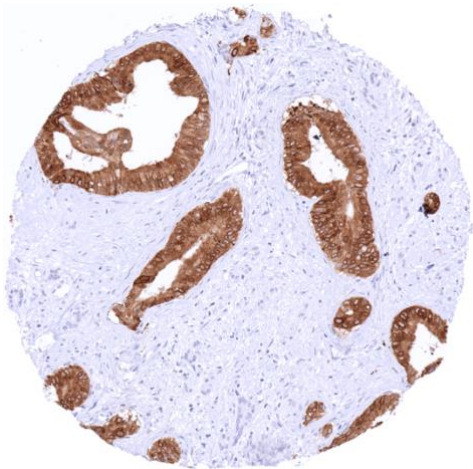


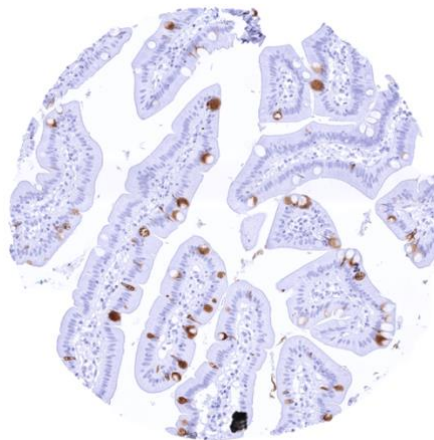
Anti- TFF1 / pS2 Antibody MSVA-482 / Mouse monoclonal

| | |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Human SwissProt | P04155 |
| Human Gene Symbol | TFF1 |
| Synonyms | BCEI, Breast Cancer Estrogen Inducible Protein, Gastrointestinal Trefoil Protein, Gastrointestinal trefoil protein pS2, HP1A, HPS2, pNR2, TFF1, Trefoil Factor 1 |
| Specificity | TFF1 |
| Immunogen | Recombinant fragment (around aa1-88) of human TFF1protein (exact sequence is proprietary) |
| Isotype | Mouse / IgG |
| Species Reactivity | Human |

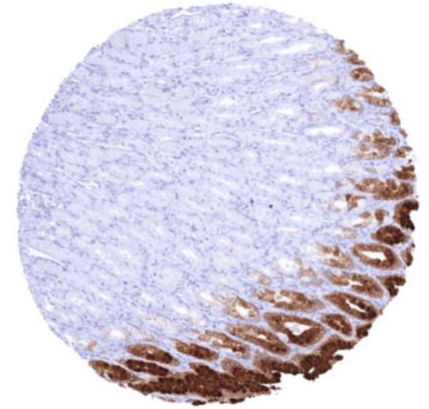
| | |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Localization | Cytoplasm |
| Storage & Stability | Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required. |
| Supplied As | 200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available without BSA |
| Positive Control | Stomach: A strong cytoplasmic TFF1 staining should be seen in the gastric surface epithelium. |
| Negative Control | Kidney: TFF1 immunostaining should be absent in all cell types. |



Ductal adenocarcinoma of the pancreas with strong TFF1 staining of all tumor cells.



Duodenal mucosa with a moderate to strong TFF1 positivity of selected goblet cells.



Surface epithelial cells of the stomach showing an intense cytoplasmic TFF1 staining.

Biology

Trefoil factor 1 (TFF1) is a highly conserved secreted protein with a molecular weight of 6.5kDa. It is coded by the TFF1 gene located at 21q22. TFF1 has lectin activities and is preferentially expressed in the gastric mucosa where it exerts a protecting effect for the mucus barrier. TFF1 plays an important role in epithelial wound repair. Its expression is partly regulated by inflammatory mediators. TFF1 is has been suggested to represent a tumor suppressor gene for the stomach because somatic TFF1 mutations have been found in gastric cancers. Tff1-deficient mice serve as a gastric cancer model because 100% of them develop adenomas in the gastric mucosa and of which about 30% progress to carcinomas. Among normal tissues, by far the highest level of TFF1 expression are seen in superficial epithelial cells of the stomach. In the remaining gastrointestinal tract, scattered TFF1 positive goblet cells occur at variable frequency. For tumors, RNA expression screening studies have described elevated TFF1 levels in gastric, colorectal, breast, pancreatic, and lung cancer.

Potential Research Applications

-TFF1 expression levels may be higher in colonic sessile serrated adenomas/polyps than in hyperplastic polyps.

Protocol Suggestions

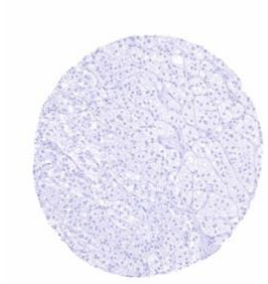
Dilution: 1:150. pH 7,8 is optimal. Freshly cut sections should be used (more than 10 days between cutting and staining deteriorates staining intensity for most antibodies in IHC).

Limitations

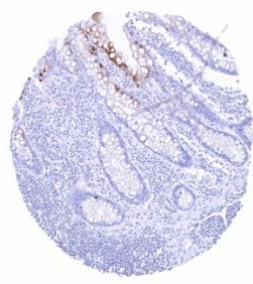
This antibody is available for **research use only** and is not approved for use in diagnostics.

Warranty

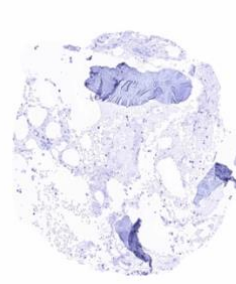
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



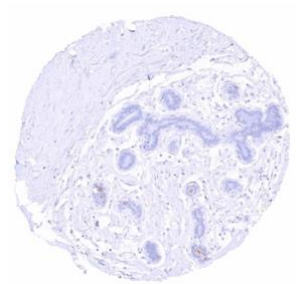
Adrenal gland



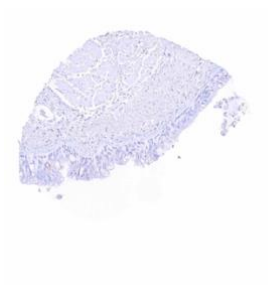
Appendix, mucosa – Moderate cytoplasmic TFF1 staining of a subset of goblet cells, mainly located at the surface epithelium



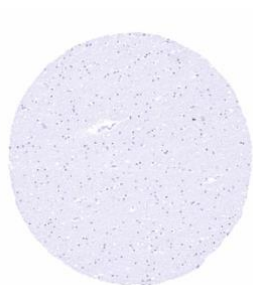
Bone marrow



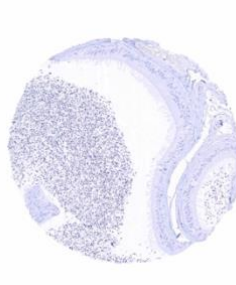
Breast – Weak to moderate TFF1 staining of very few luminal breast epithelial cells



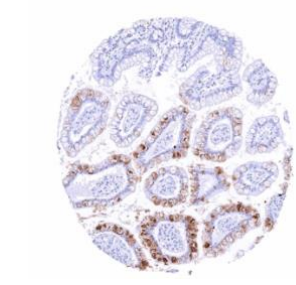
Bronchus, mucosa – Some goblet cells of the respiratory epithelium show a weak TFF1 staining



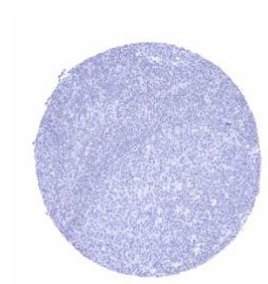
Cerebrum, white matter



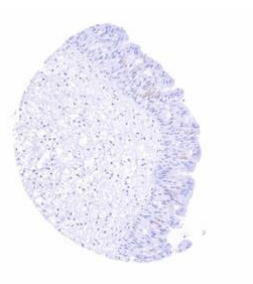
Epididymis



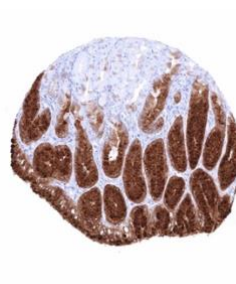
Ileum, mucosa – Moderate to strong TFF1 staining of a subset of goblet cells, predominantly at the surface or the top third of the crypts



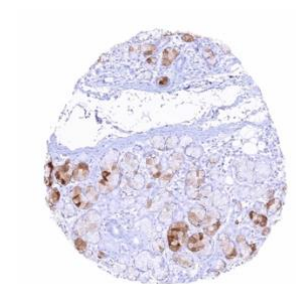
Lymph node



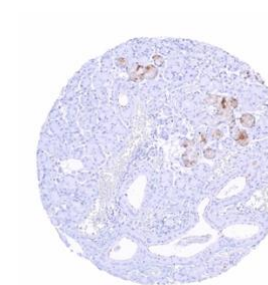
Sinus paranasales – A subset of the goblet cells of the respiratory epithelium show a weak TFF1 positivity



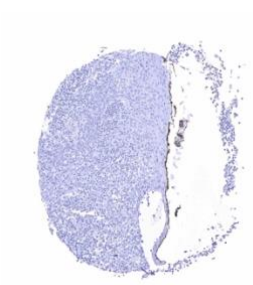
Stomach, antrum – Very intense TFF1 staining of surface epithelial cells while the stomach glands mostly remain negative



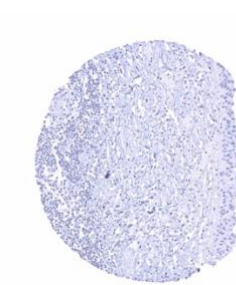
Sublingual gland – TFF1 immunostaining of variable intensity in mucinous glands



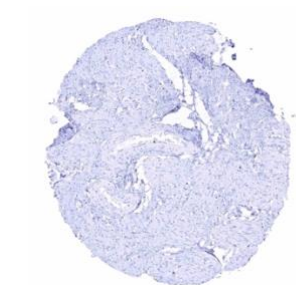
Submandibular gland – TFF1 positivity of varying intensity in mucinous glands



Tonsil, surface epithelium



Urinary bladder, urothelium – Absence of urothelial TFF1 staining in this sample



Uterus, myometrium