

Anti-Tff1 Picoband Antibody

Catalog # ABO12943

Product Information

Application	WB, IHC-P
Primary Accession	Q08423
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Trefoil factor 1(Tff1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	21784
Other Names	Trefoil factor 1, Protein pS2, Tff1, Bcei, Ps2
Calculated MW	9670
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Mouse, Rat, By Heat Western blot, 0.1-0.5 μ g/ml, Human, Mouse
Subcellular Localization	Secreted.
Tissue Specificity	Strong expression found in normal gastric mucosa. Not detected in the small or large intestine nor in normal mammary gland.
Source	Eukaryota
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	E. coli-derived mouse Tff1 recombinant protein (Position: Q22-F87). Mouse Tff1 shares 67.2% and 83.6% amino acid (aa) sequence identity with human and rat Tff1, respectively.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C for one year. After r ° Constitution, at 4 °C for one month. It ° Can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated

freezing and thawing.

Protein Information

Name	Tff1
Synonyms	Bcei, Ps2
Function	Stabilizer of the mucous gel overlying the gastrointestinal mucosa that provides a physical barrier against various noxious agents.
Cellular Location	Secreted.
Tissue Location	Strong expression found in normal gastric mucosa. Not detected in the small or large intestine nor in normal mammary gland

Background

TFF1 (Trefoil factor 1), also known as pS2, is a protein that in humans is encoded by the TFF1 gene. Members of the trefoil family are characterized by having at least one copy of the trefoil motif, a 40-amino acid domain that contains three conserved disulfides. They are stable secretory proteins expressed in gastrointestinal mucosa. Their functions are not defined, but they may protect the mucosa from insults, stabilize the mucus layer, and affect healing of the epithelium. It is found that TFF1 in normal human urine inhibited the growth of calcium oxalate crystals. Urinary TFF1 showed an inhibitory potency similar to that of nephrocalcin, and inhibition was dose dependent and inhibited by TFF1 antisera, particularly by antisera directed to the TFF1 C terminus. Concentrations and relative amounts of TFF1 in the urine of patients with idiopathic calcium oxalate kidney stones were significantly less than those found in controls. This gene, which is expressed in the gastric mucosa, has also been studied because of its expression in human tumors. This gene and two other related trefoil family member genes are found in a cluster on chromosome 21.

Images

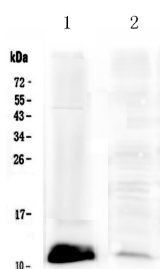
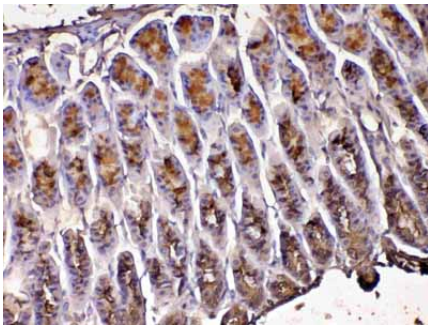


Figure 1. Western blot analysis of Tff1 using anti-Tff1 antibody (ABO12943). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse gaster tissue lysate, Lane 2: human MCF-7 whole cell lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Tff1 antigen affinity purified polyclonal antibody (Catalog # ABO12943) at 0.5 μ g/mL overnight at 4 $^{\circ}$ C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Tff1 at approximately 12KD. The expected band size for Tff1 is at 12KD.

Figure 2. IHC analysis of Tff1 using anti-Tff1 antibody (ABO12943). Tff1 was detected in paraffin-embedded section of mouse gaster. Heat mediated antigen retrieval



was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti-Tff1 Antibody (ABO12943) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

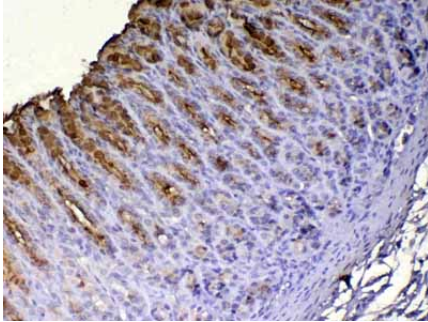


Figure 3. IHC analysis of Tff1 using anti-Tff1 antibody (ABO12943).Tff1 was detected in paraffin-embedded section of rat gaster . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti-Tff1 Antibody (ABO12943) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

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