abcam

ab109104

Anti-Trefoil Factor 3 antibody [EPR3973]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR3973
Purification technique	Affinity purification Protein A
Concentration	0.964 - 1.096 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/500 - 1/1000
Notes	-

IP

Not recommended

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information TFF3

Function	Involved in the maintenance and repair of the intestinal mucosa. Promotes the mobility of epithelial cells in healing processes (motogen).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C

Storage information	Stable for 12 months at -20°C

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Species reactivity
Rat: We have preliminary internal testing data to indicate this antibody may not react with this species.
Please contact us for more information.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Trefoil Factor 3 (TFF3) also known as intestinal trefoil factor is a small peptide with a molecular mass around 7 kDa. This protein is characterized by the presence of a trefoil domain which consists of a stable compact structure important for its function. TFF3 has significant expression in the gastrointestinal tract notably in the colon and small intestine where it acts to maintain the integrity of the mucosal barrier. It can also be found in other tissues but its concentrations vary depending on factors like tissue type and health status.
Biological function summary	TFF3 plays an important role in protecting and repairing epithelial tissues particularly those lining the gastrointestinal tract. This protein promotes epithelial restitution by aiding cell migration and inhibits apoptosis contributing to tissue healing processes. While TFF3 does not form part of a large protein complex it often interacts with mucins specifically mucin 2 to bolster the protective mucus layer which is essential for shielding epithelial cells.
Pathways	Trefoil Factor 3 is notably involved in pathways associated with mucosal immune response and inflammation. A significant pathway involving TFF3 is the mucosal defense pathway where it works alongside other mucins and proteins like epidermal growth factor (EGF) to mediate regeneration and defense of epithelial tissues after injury. It also engages in the Wnt signaling pathway where it affects cell proliferation and migration critical for maintaining epithelial homeostasis.
Associated diseases and disorders	TFF3 has links to inflammatory bowel disease (IBD) and colorectal cancer. In IBD its expression levels may be altered affecting the ability of the intestine to protect itself and heal contributing to the disease's progression. In colorectal cancer TFF3

can exhibit upregulated expression linking it to tumor growth and metastasis. Proteins such as beta-catenin in the Wnt signaling pathway which are associated with cell cycle regulation have connections with TFF3 highlighting its role in cancerous transformations.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

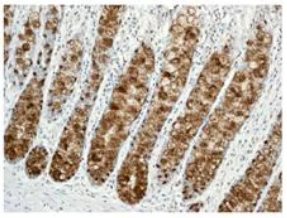
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

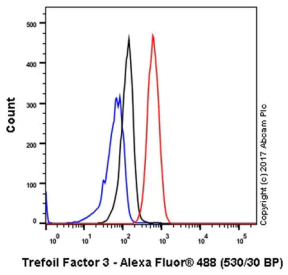
3 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Trefoil Factor 3 antibody [EPR3973] (ab109104)

Trefoil Factor 3 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Trefoil Factor 3 antibody

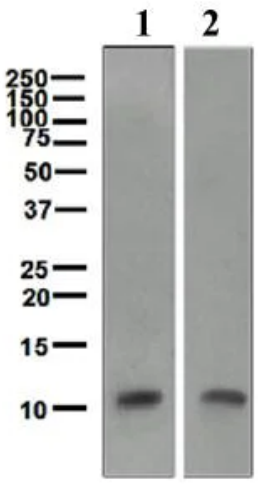
Immunohistochemical analysis of Trefoil Factor 3 in paraffin-embedded Human colon tissue using ab109104 at 1/500 dilution.
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-Trefoil Factor 3 antibody [EPR3973] (ab109104)

Trefoil Factor 3 Flow Cytometry (Intracellular) staining using rabbit Anti-Trefoil Factor 3 antibody

Intracellular Flow Cytometry analysis of HT-29 (human colorectal adenocarcinoma) cells labeling Trefoil Factor 3 with unpurified ab109104 at 1/100 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluorr® 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



Western blot - Anti-Trefoil Factor 3 antibody [EPR3973] (ab109104)

All lanes:
Western blot - Anti-Trefoil Factor 3 antibody [EPR3973] (ab109104) at 1/1000 dilution

Lane 1:
Human uterus cancer lysate at 10 µg

Lane 2:
Human colon cancer lysate at 10 µg

Predicted band size: 8 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.