

TFF3 Antibody

Catalog # ASC11258

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q07654
Other Accession	NP_003217 , 119629977
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	8641
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TFF3 antibody can be used for detection of TFF3 by Western blot at 1 - 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	7033
Other Names	Trefoil factor 3, Intestinal trefoil factor, hITF, Polypeptide P1.B, hP1.B, TFF3, ITF, TFI
Target/Specificity	TFF3; TFF3 antibody is predicted to not cross-react with other TFF family members.
Reconstitution & Storage	TFF3 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	TFF3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TFF3
Synonyms	ITF, TFI
Function	Involved in the maintenance and repair of the intestinal mucosa. Promotes the mobility of epithelial cells in healing processes (motogen).
Cellular Location	Secreted, extracellular space, extracellular matrix. Cytoplasm
Tissue Location	Expressed in goblet cells of the intestines and colon (at protein level).

Expressed by goblet cells of small and large intestinal epithelia and also by the uterus. Also expressed in the hypothalamus where it is detected in paraventricular, periventricular and supraoptic nuclei (at protein level).

Background

TFF3 Antibody: Trefoil peptides are protease resistant molecules secreted throughout the gut that play a role in mucosal healing. Trefoil peptides contain three intrachain disulfide bonds, forming the trefoil motif, or P-domain and clustered in human chromosome 21q22.3. Trefoil Factor 3 (TFF3) is one of three trefoil peptides secreted by epithelial cells that line mucus membranes in the large and small intestines and lower respiratory tract. TFF3 is mainly active as a disulfide-linked homodimer and may have a role in promoting cell migration in healing processes. It is involved in the maintenance and repair of the intestinal mucosa.

References

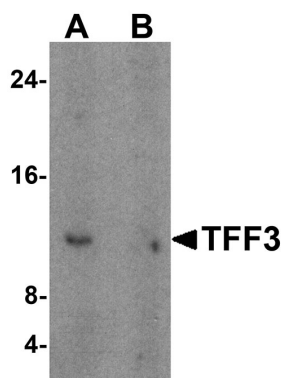
Podolsky DK, Lynch-Devaney K, Stow JL, et al. Identification of human intestinal trefoil factor. Goblet cell-specific expression of a peptide targeted for apical secretion. *J. Biol. Chem.* 1993; 268:6694-702.

Gott P, Beck S, Machado JC, et al. Human trefoil peptides: genomic structure in 21q22.3 and coordinated expression. *Eur. J. Hum. Genet.* 1996; 4:308-15.

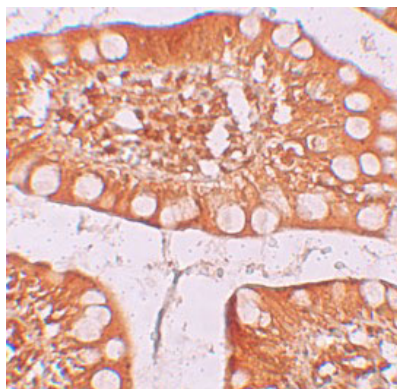
Hernandez C, Santamatilde E, McCreath KJ, et al. Induction of trefoil factor TFF1, TFF2 and TFF3 by hypoxia is mediated by hypoxia inducible factor-1: implications for gastric mucosal healing. *Br. J. Pharmacol.* 2009; 156:262-72.

Thim L. Trefoil peptides: from structure to function. *Cell Mol. Life Sci.* 1997; 53:888-903.

Images

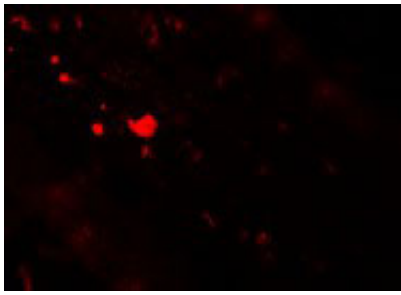


Western blot analysis of TFF3 in human colon tissue lysate with TFF3 antibody at 1 $\mu\text{g/mL}$ in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of TFF3 in human small intestine tissue with TFF3 antibody at 2.5 $\mu\text{g/mL}$.

Immunofluorescence of TFF3 in Human Small Intestine tissue with TFF3 antibody at 20 $\mu\text{g/mL}$.



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