Order online now!

www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 600-401-FB8

TEM1 Antibody

Overview

Description:	Anti-TEM1 (RABBIT) Antibody - 600-401-FB8
Item No.:	600-401-FB8
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Tumor endothelial marker (TEM) 1 was originally identified as a human embryonic fibroblast-specific antigen and was later determined to be endosialin, a single-pass transmembrane glycoprotein that has multiple extracellular domains, including three EGF-like domains, a sushi-like domain, and a C lectin-like domain. TEM proteins are significantly up-regulated during angiogenesis and neoangiogenesis that are crucial for the growth of solid tumors. While TEM1 is not required for angiogenesis during fetal development, postnatal growth or wound healing, it plays a role in tumor growth, invasion, and metastasis. Fibronectin and collagen types I and IV act as specific ligands of TEM1, leading to suggestions that these molecules may cause changes in the extracellular matrix, cell adhesion and migration during tumor invasion.
Synonyms:	TEM1 Antibody, CD164L1, Endosialin, Tumor endothelial marker 1, CD248
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	CD248
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-TEM1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 14 amino acid synthetic peptide near the N-terminus of the human TEM1. The immunogen is located within amino acids 40-90 of TEM-1.
Purity/Specificity:	Anti-TEM1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. At least two isoforms of TEM1 are known to exist; this antibody recognizes only the larger isoform. Predicted species reactivity based on immunogen sequence: Mouse (100%); Rat: (93%).
Relevant Links:	• UniProtKB - Q9HCU0 • GeneID - 57124 • NCBI - NP_065137.1

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-TEM1 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 81 kDa in Western Blots of specific cell lysates and tissues. Observed: 90 kD (post-modifications: 27 O-linked glycosylations). Positive controls used are human colon tissues, Caco2 cells, MCF-7 cells, and SK-N-SH cells.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5000 - 1:10000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	0.5-1 µg/mL

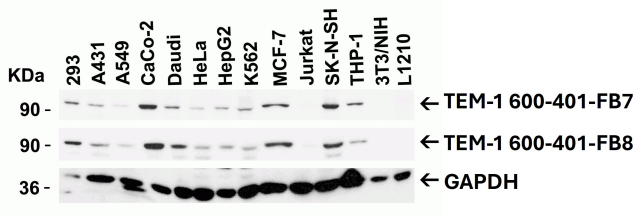
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0mg/ml by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

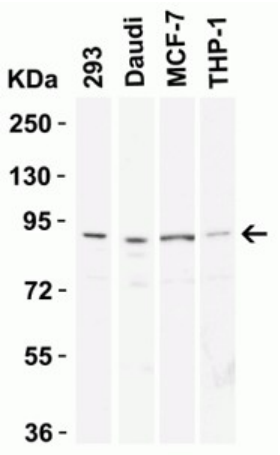
Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.
Expiration:	Expiration date is one (1) year from date of receipt.

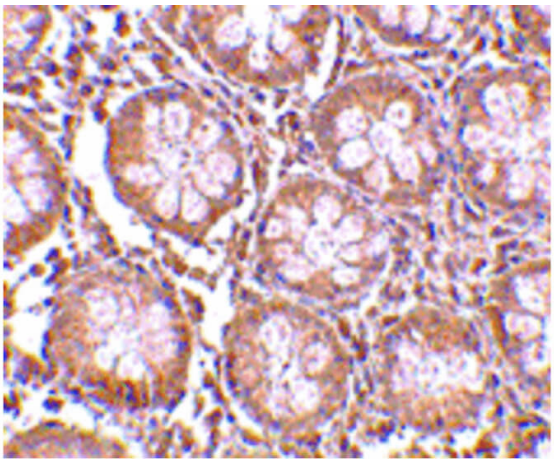
Images



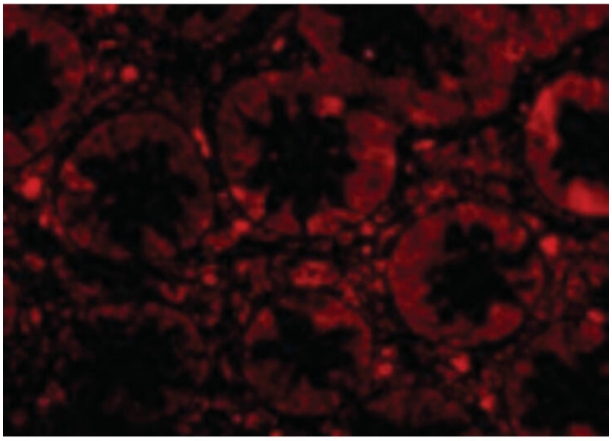
Western Blot
Western Blot using TEM1. Loading: 15 µg of lysates per lane. Antibodies: TEM-1 p/n 600-401-FB7, (2 µg/mL), TEM-1 p/n 600-401-FB8, (1µg/mL), and GAPDH (0.02 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



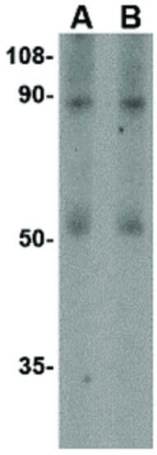
Western Blot
Western Blot using TEM1. Loading: 15 µg of human cell line lysates per lane. Antibodies: TEM-1 4359, (0.5 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Immunohistochemistry
Immunohistochemistry of TEM1 antibody. Tissue: Human colon tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: TEM1 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: TEM1 is nuclear and occasionally cytoplasmic. Staining: TEM1 as precipitated red signal with hematoxylin purple nuclear counterstain.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of TEM1 antibody. Tissue: Human colon cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: TEM1 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: TEM1 as a red fluorescent signal.



Western Blot
Western Blot of TEM1 antibody. Lane A: Human colon tissue lysate at 0.5 µg/mL. Lane B: Human colon tissue lysate at 1 µg/mL. Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 66.1 kDa, ~88 kDa for TEM1. Other band(s): TEM1 splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.