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Datasheet for 600-401-FC3

TEM5 Antibody

Overview

Description:	Anti-TEM5 (RABBIT) Antibody - 600-401-FC3
Item No.:	600-401-FC3
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Rat
Host Species:	Rabbit

Product Details

Background:	Tumor endothelial markers (TEMs) are significantly up-regulated during angiogenesis and neoangiogensis that are crucial for the growth of solid tumors. TEMs localized on the cell surface and conserved across species are of particular interest for future development of anti-angiogenic therapies. These include TEMs such as TEM1, TEM5, TEM7 and TEM8. TEM5 is a member of the adhesion family of G protein coupled receptors and is localized on the surface of endothelial cells. TEM5 is a seven-pass transmembrane receptor, unlike TEM1, TEM7 and TEM8 which span the membrane once. TEM5 is abundantly expressed in tumor vessels, heart, placenta, ovary, small intestine, and colon. Proteolytically processed soluble TEM5 mediates endothelial cell survival during angiogenesis by linking integrin to glycosaminoglycans.
Synonyms:	TEM5 Antibody, KIAA1531, G-protein coupled receptor 124, Tumor endothelial marker 5, Adhesion G protein-coupled receptor A2, GPR124
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ADGRA2
Reactivity:	Human, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-TEM5 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 14 amino acid synthetic peptide near the internal region of human TEM5.
Purity/Specificity:	Anti-TEM5 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with TEM5 with Human based on 100% homology with the immunizing sequence. Cross-reactivity with TEM5 from Mouse (85%); other sources has not been determined.
Relevant Links:	• UniProtKB - Q96PE1 • GeneID - 25960 • NCBI - NP_116166.9

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-TEM5 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry-P, and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 143 kDa in Western Blots of specific cell lysates and tissues. Positive control: rat kidney tissue.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000 - 1:40,000
IF:	20 µg/mL
IHC:	5 µg/mL
WB:	2-4 µg/mL

Formulation

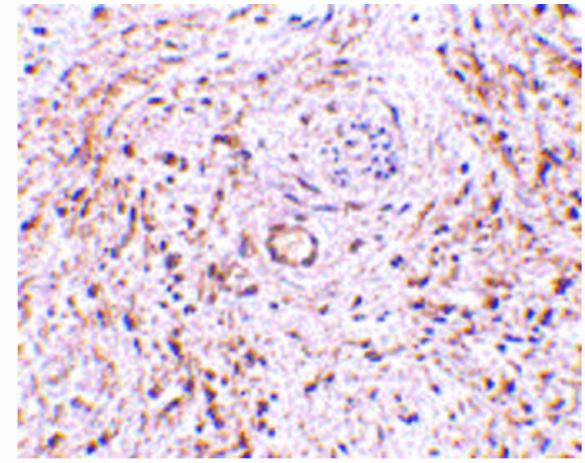
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

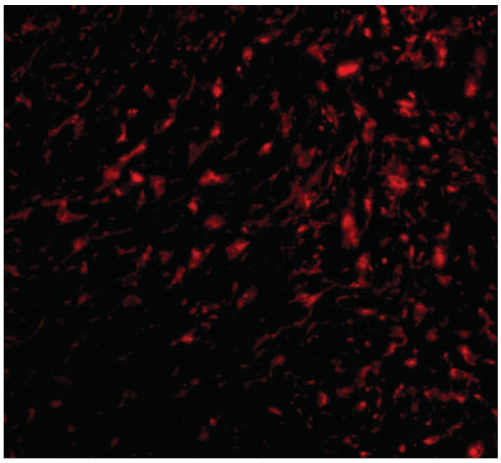
Shipping Condition:	Wet Ice

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.

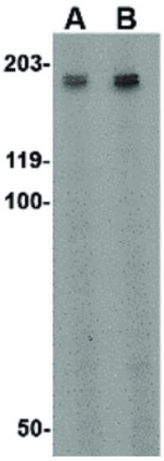
Images



Immunohistochemistry
Immunohistochemistry of TEM5 antibody. Tissue: Human bladder tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: TEM5 antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: TEM5 is nuclear and occasionally cytoplasmic. Staining: TEM5 as precipitated red signal with hematoxylin purple nuclear counterstain.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of TEM5 antibody. Tissue: Human bladder tissue. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: TEM5 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: TEM5 as a red fluorescent signal.



Western Blot

Western Blot of TEM5 antibody. Lane A: Kidney tissue lysate at 2 µg/ml. Lane B: Kidney tissue lysate at 4 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: 80.8 kDa, ~200 kDa for TEM5.

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.