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# TEM1 Antibody
**Catalog # ASC10595**

## Specification

### TEM1 Antibody - Product Information

| | |
|---|---|
| Application | **WB, IHC, IF** |
| Primary Accession | Q9HCU0 |
| Other Accession | NP_065137, 57124 |
| Reactivity | **Human, Mouse, Rat** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **IgG** |
| Calculated MW | **Predicted: 48, 83 kDa**<br><br>**Observed: 50, 88 kDa KDa** |
| Application Notes | **TEM1 antibody can be used for detection of TEM1 by Western blot at 0.5 - 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.** |

### TEM1 Antibody - Additional Information

Gene ID **57124**

**Target/Specificity**
TEM1 antibody was raised against a 14 amino acid synthetic peptide near the carboxy terminus of the human TEM1.<br><br>The immunogen is located within the last 50 amino acids of TEM1.

**Reconstitution & Storage**
TEM1 antibody can be stored at 4℃ for three months and -20℃, 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**
TEM1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### TEM1 Antibody - Protein Information

**Name** CD248

**Synonyms** CD164L1, TEM1

**Function**
May play a role in tumor angiogenesis.

**Cellular Location**
Membrane; Single-pass type I membrane protein

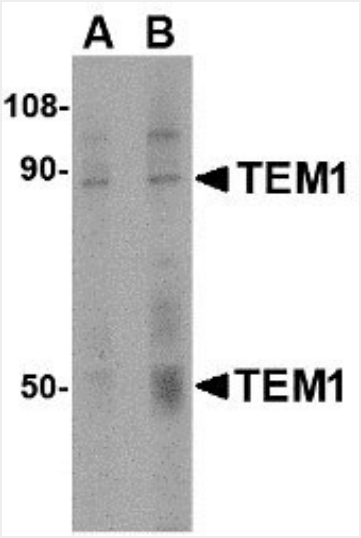
**Tissue Location**
Expressed in tumor endothelial cells but absent or barely detectable in normal endothelial cells. Expressed in metastatic lesions of the liver and during angiogenesis of corpus luteum formation and wound healing. Expressed in vascular endothelial cells of malignant tumors but not in normal blood vessels. Expressed in stromal fibroblasts.

## TEM1 Antibody - Protocols

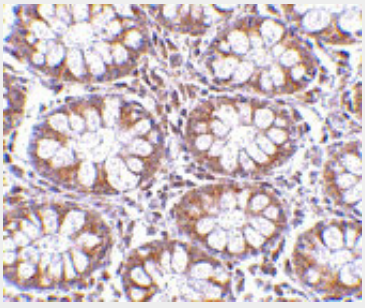
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## TEM1 Antibody - Images




Western blot analysis of TEM1 in human colon tissue lysate with TEM1 antibody at (A) 0.5 and (B) 1 µg/mL.



Immunohistochemistry of TEM1 in human colon tissue with TEM1 antibody at 2.5 µg/mL.

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Immunofluorescence of TEM1 in Human Colon tissue with TEM1 antibody at 20 µg/mL.

**TEM1 Antibody - Background**

TEM1 Antibody: 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.

**TEM1 Antibody - References**

Rettig WJ, Garin-Chesa P, Healey JH, et al. Identification of endosialin, a cell surface glycoprotein of vascular endothelial cells in human cancer. Proc. Natl. Acad. Sci. USA 1992; 89:10832-6.
Christian S, Ahorn H, Koehler A, et al. Molecular cloning and characterization of endosialin, a C-type lectin-like cell surface receptor of tumor endothelium. J. Biol. Chem. 2001; 276:7408-14.
Nanda A and St Croix B. Tumor endothelial markers: new targets for cancer therapy. Curr. Opin. Oncol. 2004; 16:44-9.
Nanda A, Karim B, Peng Z, et al. Tumor endothelial marker 1 (TEM1) functions in the growth and progression of abdominal tumors. Proc. Natl. Acad. Sci. USA 2006; 103:3351-6.