

TEM7 Antibody
Catalog # ASC10587**Specification**

TEM7 Antibody - Product Information

Application	WB, IHC-P, IF, E
Primary Accession	Q8IUK5
Other Accession	AAG00869 , 14017379
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	TEM7 antibody can be used for detection of TEM7 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.

TEM7 Antibody - Additional Information

Gene ID	57125
Target/Specificity	
PLXDC1;	

Reconstitution & Storage

TEM7 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

TEM7 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TEM7 Antibody - Protein Information

Name PLXDC1

Synonyms TEM3, TEM7

Function

Plays a critical role in endothelial cell capillary morphogenesis.

Cellular Location

Secreted [Isoform 2]: Secreted. [Isoform 4]: Cytoplasm.

Tissue Location

Detected in urine (at protein level) (PubMed:25326458, PubMed:36213313, PubMed:37453717).
Detected in endothelial cells from colorectal cancer, and in endothelial cells from primary cancers

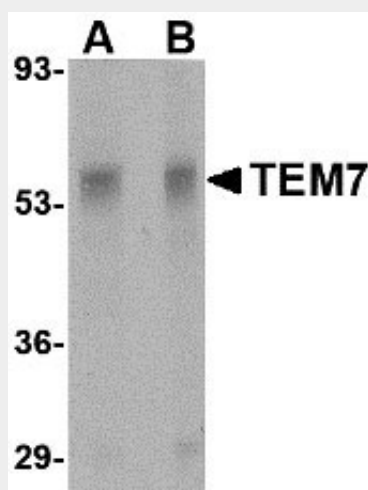
of the lung, liver, pancreas, breast and brain. Not detectable in endothelial cells from normal tissue. Expressed in fibrovascular membrane with increased expression in individuals with proliferative diabetic retinopathy.

TEM7 Antibody - Protocols

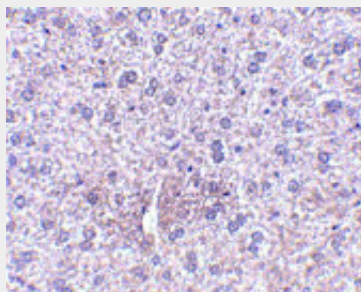
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

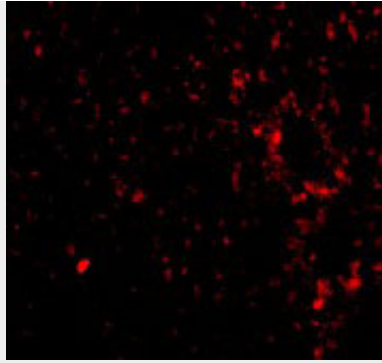
TEM7 Antibody - Images



Western blot analysis of TEM7 in rat liver tissue lysate with TEM7 antibody at (A) 0.5 and (B) 1 µg/mL.



Immunohistochemistry of TEM7 in mouse liver tissue with TEM7 antibody at 2.5 µg/mL.



Immunofluorescence of TEM7 in Mouse Liver cells with TEM7 antibody at 20 µg/mL.

TEM7 Antibody - Background

TEM7 Antibody: Tumor endothelial marker 7 (TEM7) was identified through serial analysis of gene expression on endothelial cells isolated from human normal and malignant colorectal tissues. Further experiments verified TEM7 was highly expressed in the endothelium of numerous other cancer types including breast, lung and brain tumors. At least four isoforms of TEM7 are known to exist; these include intracellular, secreted, and membrane-bound forms. A homologous protein, TEM7R (also known as PLXDC2), acts as a binding partner to TEM7 and is also abundantly expressed in the endothelium of malignant colorectal cancer but is absent or rare in normal colon mucosa. High expression of TEM7 is associated with metastasis and poor survival of patients with osteogenic sarcoma.

TEM7 Antibody - References

- St. Croix B, Rago C, Velculescu V, et al. Genes expressed in human tumor endothelium. *Science* 2000; 289:1197-202.
- Nanda A, Buckhaults P, Seaman S, et al. Identification of a binding partner for the endothelial cell surface proteins TEM7 and TEM7R. *Cancer Res.* 2004; 64:8507-11.
- Carson-Weber EB, Watkins DN, Nanda A, et al. Cell surface tumor epithelial markers are conserved in mice and humans. *Cancer Res.* 2001; 61:6649-55.
- Fuchs B, Mahlum E, Halder C, et al. High expression of tumor endothelial marker 7 is associated with metastasis and poor survival of patients with osteogenic sarcoma. *Gene* 2007; 399:137-43.