

TEM1 (NT) antibody (pAb)

Rabbit Anti-Human/Mouse/Rat TEM1 (NT)

Instruction Manual

Catalog Number	PK-AB718-4359
Synonyms	TEM1 Antibody; Tumor endothelial marker 1, endosialin, CD248, CD164L1
Description	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. At least two isoforms of TEM1 are known to exist; this antibody recognizes only the larger isoform.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	TEM1 antibody was raised in rabbits against a 14 amino acid peptide near the amino terminus of the human TEM1.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	At least two isoforms of TEM1 are known to exist; this antibody recognizes only the larger isoform.
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C 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.
Applications	E, WB, IHC, IF INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. 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.
Images	Available upon request.
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.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4359P; TEM1 Peptide Cat.No. PK-AB718-1320; Human Colon Tissue Lysate

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