

TEM5 Antibody

TEM5 (CT): Tumor endothelial marker 5, G protein-coupled receptor 124, GPR124

CATALOG No.:4369

BACKGROUND:

Tumor endothelial markers (TEMs) are significantly up-regulated during angiogenesis and neoangiogenesis 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 (1). 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 (1-3). 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 (4).

SOURCE:

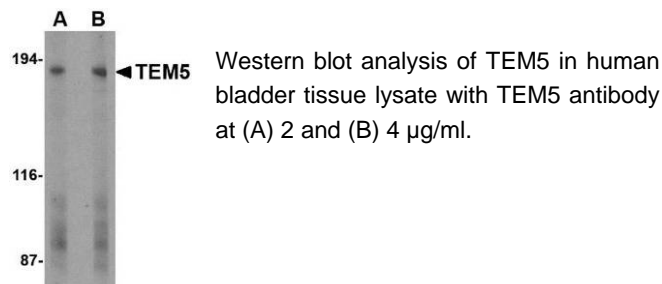
Rabbit polyclonal TEM5 antibody was raised against a 15 amino acid peptide near the carboxy terminus of the human TEM5 (GenBank accession no. Q96PE1).

APPLICATION:

TEM5 antibody can be used for detection of TEM5 by Western blot at 1 – 2 µg/ml. (Optimal dilution should be determined by user.) Human bladder tissue lysate can be used as positive control. TEM5 antibody is human and rat reactive. **For research use only.**

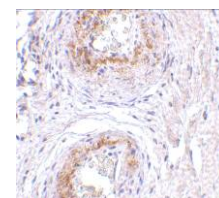
STORAGE:

TEM5 antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of TEM5 in human bladder tissue lysate with TEM5 antibody at (A) 2 and (B) 4 µg/ml.

Immunohistochemistry of TEM5 in human bladder tissue with TEM5 antibody at 5 µg/ml.



RELATED PRODUCTS:

- Blocking Peptide, Catalog No. **4369P**.
- Human bladder tissue lysate, Catalog No. **1310**.
- TEM1 Antibody (CT), Catalog No. **4357**.
- TEM2 Antibody (CT), Catalog No. **4361**.
- TEM5 Antibody (IN), Catalog No. **4371**.
- TEM4 Antibody (IN), Catalog No. **4367**.
- TEM7 Antibody (CT), Catalog No. **4339**.

REFERENCES:

- Carson-Walter EB, Watkins DN, Nanda A, et al. Cell surface tumor endothelial markers are conserved in mice and humans. *Cancer Res.* 2001; 61:6649-55.
- Yamamoto Y, Irie K, Nanda A, et al. Direct binding of the human homologue of the Drosophila disc large tumor suppressor gene to seven-pass transmembrane proteins, tumor endothelial marker 5 (TEM5), and a novel TEM5-like protein. *Oncogene* 2004; 23:3889-97.
- Nanda A and St Croix B. Tumor endothelial markers: new targets for cancer therapy. *Curr. Opin. Oncol.* 2004; 16:44-9.
- Vallon M and Essler M. Proteolytically processed soluble tumor endothelial marker (TEM) 5 mediates endothelial cell survival during angiogenesis by linking integrin alpha(v)beta3 to glycosaminoglycans. *J. Biol. Chem.* 2006; 281:34179-88. (08-02D)