



Anti-Tumor endothelial marker 1(TEM1 or endosialin) , Rabbit-Polyclonal Antibody

Catalog No. GB-10374

Antigen species: Human

Host species: Rabbit

Quantity: 100 μ g

Reactivity: Human

Form: Peptide affinity purified antibody

Applications tested: ELISA

Target description

Using SAGE (Serial Analysis of Gene Expression) technology, St. Croix et al, have identified 46 genes, whose expression is specifically elevated in tumor-associated endothelium. Nine of these genes were prominently expressed only in tumor endothelial cells (EC), but were absent or barely detectable in normal ECs, and named as Tumor Endothelial Markers (TEMs, TEM 1-9). TEM1 was predicted to encode a type I transmembrane protein of 757 amino acids. The majority (685 amino acids) of the sequence was predicted to be extracellular, with only a short COOH-terminal cytoplasmic tail. A homology search revealed that the extracellular region of TEM1 has three EGF-like domains, as well as a C-lectin-like carbohydrate recognition domain with similarity to thrombomodulin.

Antigen

This polyclonal antibody was raised by immunizing rabbit with a synthetic peptide located within the putative C-type lectin domain (CLECT, C-type lectin (CTL) or carbohydrate-recognition domain (CRD)) of human TEM1.

Application

The antibody titer is than 40000K for ELISA. It has not been tested in the other applications. However, for the first testing, we recommend 1/50,000 dilution for ELISA, 1/10,000 dilution for Western blot analysis (WB) of recombinant protein, 1/4000 dilution for tissue extracts or cell lysates, 1/300 dilution for immunohistochemistry (IHC) staining on frozen cryosections, 1/100 dilution for IHC staining on paraffin embedded sections.

Related Products

1. Anti-TEM2 pAb (GB-30131).
2. Anti-TEM3 pAb (GB-30132).
3. Anti-TEM4 pAb (GB-30133).
4. Anti-TEM5 pAb (GB-10011).
5. Anti-TEM5 pAb (GB-30028).
6. Anti-TEM5 pAb (GB-30088).
7. Anti-TEM8 pAb (GB-10344).
8. Anti-TEM8 pAb (GB-10009).
9. Anti-TEM8 pAb (GB-10010).
10. Anti-TEM8 pAb (GB-30021).
11. Anti-TEM8 pAb (GB-30133).

Ab dilution	Pre-bleed	Purified-Ab
1:1K	0.137	1.955
1:10K	0.064	1.853
1:100K	0.053	1.294
1:1,000K	0.061	0.524
1:10,000K	0.060	0.199
1:100,000K	0.060	0.081
Titer		40234 K

ELISA Protocol

Concentration of test purified pAb is 1mg/mL

Antigen is coated on EIA strips at 1 μ g per well. Add 200 μ l of blocking buffer and then wash wells with PBST buffer. Antiserum and purified Ab of GB-10374 is diluted in series as $10^3 \sim 10^8$ folds and added in separate wells. Incubate antibody for 1hr. Wash unbound antibodies and add anti-rabbit IgG-HRP conjugate. Wash the plates and add substrate to develop color for 5 min. Read absorbance (ABS) at 650 nm. Amount of color is directly proportional to the amount of antibodies. Antibody titer is defined as maximal dilution with >0.1 of ABS of antiserum minus prebleed serum.

Storage

It is supplied as peptide affinity purified antibody in lyophilized powder. Redissolve the powder with 100 microliter sterile water will restore to the original concentration 1mg/ml (1 \times PBS). Store at 4 $^{\circ}$ C for short-term application. For long-term storage, aliquot and store at -20 $^{\circ}$ C.

References

1. Nagase T, Ishikawa K., Nakajima D, Ohira M , Seki N, Miyajima N, Tanaka A, Kotani H, Nomura N, and Ohara O. DNA Res. 4 (2), 141-150 (1997).
2. St.Croix B, Rago C, Velculescu V, Traverso G, Romans KE, Montgomery E, Lal A, Riggins GJ, Lengauer C, Vogelstein B and Kinzler KW. Science 289 (5482), 1197-1202 (2000).
3. Carson-Walter, E.B., Watkins, D.N., Nanda, A., Vogelstein, B., Kinzler, K.W. and St Croix, B. Cell surface tumor endothelial markers are conserved in mice and humans. Cancer Res. 61 (18), 6649-6655 (2001).

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