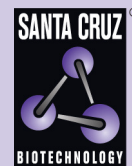


TEM1 (K-16): sc-48097



The Power to Question

BACKGROUND

Tumor endothelial marker 1 (TEM1/Endosialin) is a heavily glycosylated, type I transmembrane C-type lectin-like receptor of the Ras superfamily expressed in the vascular endothelium and on fibroblast-like cells in developing organs. Expression of TEM1 largely disappears in adulthood. TEM1 is structurally related to thrombomodulin and complement receptor C1qRp. It consists of three EGF-like domains, a C-type lectin domain and a sushi domain. TEM1 is highly upregulated in tumor endothelium and is known to function in tumor growth and progression. For this reason TEM1 is a major target in anti-angiogenic tumor therapy. TEM1 may be responsible for concentrating liposomes on the surface of target cells and promoting their fusion with the cell membrane.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CD248 (human) mapping to 11q13.2; Cd248 (mouse) mapping to 19 A.

SOURCE

TEM1 (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TEM1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-48097 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TEM1 (K-16) is recommended for detection of TEM1 of human and, to a lesser extent, mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TEM1 (K-16) is also recommended for detection of TEM1 in additional species, including canine.

Suitable for use as control antibody for TEM1 siRNA (h): sc-61659, TEM1 siRNA (m): sc-61660, TEM1 shRNA Plasmid (h): sc-61659-SH, TEM1 shRNA Plasmid (m): sc-61660-SH, TEM1 shRNA (h) Lentiviral Particles: sc-61659-V and TEM1 shRNA (m) Lentiviral Particles: sc-61660-V.

Molecular Weight of TEM1: 165 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. Carson-Walter, E.B., Winans, B.N., Whiteman, M.C., Liu, Y., Jarvela, S., Haapasalo, H., Tyler, B.M., Huso, D.L., Johnson, M.D. and Walter, K.A. 2009. Characterization of TEM1/endosialin in human and murine brain tumors. *BMC Cancer* 9: 417.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **TEM1 (G-9): sc-377221**, our highly recommended monoclonal alternative to TEM1 (K-16).