

TEM7R (A-14): sc-137831

BACKGROUND

TEM7R (tumor endothelial marker 7-related protein), also known as PLXDC2 (plexin domain-containing protein 2), is a 529 amino acid single-pass type I membrane protein containing one PSI domain and belonging to the plexin family. Localizing to membrane, TEM7R is expressed in endothelial cells of the stroma, as well as in limbs, lung buds, developing heart, spinal cord and dorsal root ganglia. TEM7R interacts with cortactin and may play a role in tumor angiogenesis. Existing as three alternatively spliced isoforms, the gene encoding TEM7R maps to human chromosome 10p12.31. Spanning nearly 135 million base pairs, chromosome 10 makes up approximately 4.5% of total DNA in cells and encodes nearly 1,200 genes. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PLXDC2 (human) mapping to 10p12.31; Plxdc2 (mouse) mapping to 2 A2.

SOURCE

TEM7R (A-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal extracellular domain of TEM7R 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-137831 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TEM7R (A-14) is recommended for detection of TEM7R of mouse, rat and human 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); non cross-reactive with TEM7.

TEM7R (A-14) is also recommended for detection of TEM7R in additional species, including canine.

Suitable for use as control antibody for TEM7R siRNA (h): sc-90495, TEM7R siRNA (m): sc-154187, TEM7R shRNA Plasmid (h): sc-90495-SH, TEM7R shRNA Plasmid (m): sc-154187-SH, TEM7R shRNA (h) Lentiviral Particles: sc-90495-V and TEM7R shRNA (m) Lentiviral Particles: sc-154187-V.

Molecular Weight of TEM7R isoforms 1/2/3: 60/54/16 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.

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.