SANTA CRUZ BIOTECHNOLOGY, INC.

TES (D-18): sc-34736

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

TES was originally identified as a candidate tumour suppressor gene and has been found to encode a novel focal adhesion protein called TES or Testin. TES localises to cell-cell contacts and actin stress fibres, and interacts with a variety of cytoskeletal proteins including zyxin, mena, VASP, talin and actin. The ability of TES to associate with α-actinin, paxillin, and zyxin is dependent on the conformational state of the molecule. TES contains three LIM zinc-binding domains and may act as a tumor suppressor. Overexpression of the TES gene results in increased cell spreading and decreased cell motility.

REFERENCES

1. Garvalov, B.K., Higgins, T.E., Sutherland, J.D., Zettl, M., Scaplehorn, N., Kocher, T., Piddini, E., Griffiths, G. and Way, M. 2003. The conformational state of TES regulates its zyxin-dependent recruitment to focal adhesions. J. Cell Biol. 161: 33-39.
2. Coutts, A.S., MacKenzie, E., Griffith, E. and Black, D.M. 2003. TES is a novel focal adhesion protein with a role in cell spreading. J. Cell Sci. 116: 897-906.
3. Chene, L.,Giroud, C., Desgrandchamps, F., Boccon-Gibod, L., Cussenot, O., Berthon, P. and Latil, A. 2004. Extensive analysis of the 7q31 region in human prostate tumors supports TES as the best candidate tumor suppressor gene. Int. J. Cancer 111: 798-804.
4. Griffith, E., Coutts, A.S. and Black, D.M. 2005. RNAi knockdown of the focal adhesion protein TES reveals its role in actin stress fibre organisation. Cell Motil. Cytoskeleton 60: 140-152.
5. Rotter, B., Bournier, O., Nicolas, G., Dhermy, D. and Lecomte, M.C. 2005. αII-spectrin interacts with TES and EVL, two actin-binding proteins located at cell contacts. Biochem. J. 388: 631-638.

CHROMOSOMAL LOCATION

Genetic locus: TES (human) mapping to 7q31.2; Tes (mouse) mapping to 6 A2.

SOURCE

TES (D-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TES 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-34736 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

PROTOCOLS

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

APPLICATIONS

TES (D-18) is recommended for detection of TES of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

TES (D-18) is also recommended for detection of TES in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TES siRNA (h): sc-45509, TES siRNA (m): sc-45510, TES shRNA Plasmid (h): sc-45509-SH, TES shRNA Plasmid (m): sc-45510-SH, TES shRNA (h) Lentiviral Particles: sc-45509-V and TES shRNA (m) Lentiviral Particles: sc-45510-V.

Molecular Weight of TES: 48 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210 or K-562 whole cell lysate: sc-2203.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

RESEARCH USE

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