

TES (G-9): sc-271184

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 localizes to cell-cell contacts, actin stress fiber 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 3 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.

CHROMOSOMAL LOCATION

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

SOURCE

TES (G-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 235-274 within an internal region of TES of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TES (G-9) is available conjugated to agarose (sc-271184 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271184 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271184 PE), fluorescein (sc-271184 FITC), Alexa Fluor[®] 488 (sc-271184 AF488), Alexa Fluor[®] 546 (sc-271184 AF546), Alexa Fluor[®] 594 (sc-271184 AF594) or Alexa Fluor[®] 647 (sc-271184 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-271184 AF680) or Alexa Fluor[®] 790 (sc-271184 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-271184 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

TES (G-9) is recommended for detection of TES of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 (G-9) is also recommended for detection of TES in additional species, including equine, canine, bovine and porcine.

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.

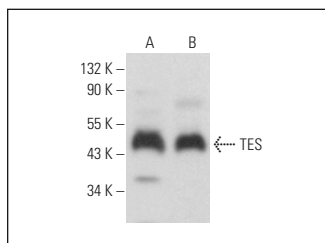
Molecular Weight of TES: 48 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, rat testis extract: sc-2400 or NIH/3T3 whole cell lysate: sc-2210.

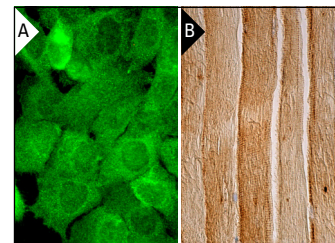
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



TES (G-9): sc-271184. Western blot analysis of TES expression in K-562 whole cell lysate (A) and rat testis tissue extract (B).



TES (G-9): sc-271184. Immunofluorescence staining of formalin-fixed A-431 cells showing cytoplasmic and membrane localization (A) and immunoperoxidase staining of formalin fixed, paraffin-embedded human skeletal muscle tissue showing cytoplasmic and membrane staining of myocytes (B).

SELECT PRODUCT CITATIONS

- Hadzic, E., et al. 2015. Delineating the TES interaction site in Zyxin and studying cellular effects of its disruption. *PLoS ONE* 10: e0140511.
- Li, H., et al. 2016. TES inhibits colorectal cancer progression through activation of p38. *Oncotarget* 7: 45819-45836.
- Byron, A., et al. 2022. Characterisation of a nucleo-adhesome. *Nat. Commun.* 13: 3053.

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 for detailed protocols and support products.

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