

TAB182 (D-5): sc-514517

BACKGROUND

Tankyrase-1 and -2 are closely related poly(ADP-ribose) polymerases that colocalize and use an ankyrin-repeat domain to bind diverse proteins, including TRF-1 (telomere-repeat-binding factor 1), IRAP (Insulin-responsive aminopeptidase), and TAB182. Tankyrase-1 and Tankyrase-2 mediate overlapping functions, both at telomeres and in vesicular compartments. TAB182 is a Tankyrase binding protein which not only binds to the ANK repeat domain of Tankyrase-1 and Tankyrase-2, but also serves as an acceptor of poly(ADP-ribosylation) by Tankyrase-1. TAB182 is expressed in multiple tissues such as the kidney, pancreas, heart, lung, liver, and ovary, as well as the brain and peripheral blood leukocytes, to a lesser extent. The TAB182 protein localizes to nucleus and to the cytoplasm, where it colocalizes with the cortical actin network. Two basic regions at the N-terminal and C-terminal domains of TAB182 and a large internal acidic region comprise TAB182. The C-terminal domain also contains two possible nuclear localization signals.

CHROMOSOMAL LOCATION

Genetic locus: TNKS1BP1 (human) mapping to 11q12.1; Tnks1bp1 (mouse) mapping to 2 D.

SOURCE

TAB182 (D-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1151-1176 within an internal region of TAB182 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TAB182 (D-5) is available conjugated to agarose (sc-514517 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514517 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514517 PE), fluorescein (sc-514517 FITC), Alexa Fluor® 488 (sc-514517 AF488), Alexa Fluor® 546 (sc-514517 AF546), Alexa Fluor® 594 (sc-514517 AF594) or Alexa Fluor® 647 (sc-514517 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514517 AF680) or Alexa Fluor® 790 (sc-514517 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514517 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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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 for detailed protocols and support products.

APPLICATIONS

TAB182 (D-5) is recommended for detection of TAB182 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for TAB182 siRNA (h): sc-61633, TAB182 siRNA (m): sc-155970, TAB182 shRNA Plasmid (h): sc-61633-SH, TAB182 shRNA Plasmid (m): sc-155970-SH, TAB182 shRNA (h) Lentiviral Particles: sc-61633-V and TAB182 shRNA (m) Lentiviral Particles: sc-155970-V.

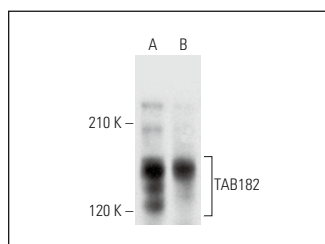
Molecular Weight of TAB182: 182 kDa.

Positive Controls: ES-2 cell lysate: sc-24674, Jurkat whole cell lysate: sc-2204 or NCI-H1299 whole cell lysate: sc-364234.

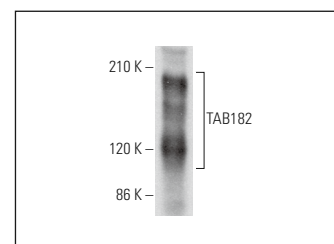
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



TAB182 (D-5): sc-514517. Western blot analysis of TAB182 expression in ES-2 (A) and NCI-H1299 (B) whole cell lysates.



TAB182 (D-5): sc-514517. Western blot analysis of TAB182 expression in Jurkat whole cell lysate.

SELECT PRODUCT CITATIONS

- Martinez, M., et al. 2021. Quantitative proteomics reveals that the OGT interactome is remodeled in response to oxidative stress. *Mol. Cell. Proteomics* 20: 100069.
- Cao, Y., et al. 2021. Elevated TAB182 enhances the radioresistance of esophageal squamous cell carcinoma through G2-M checkpoint modulation. *Cancer Med.* 10: 3101-3112.

RESEARCH USE

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