

# TPD52 (A-6): sc-166732

## BACKGROUND

The tumor protein D52 (TPD52) family consists of three members, TPD52, TPD52L1 (D53) and TPD52L2 (D54). These small coiled-coil motif bearing proteins interact in hetero- and homomeric fashion. The TPD52 gene maps to chromosome 8q21.13 and due to amplification, shows frequent overexpression in prostate and breast carcinomas. TPD52 binds to annexin VI in a Ca<sup>2+</sup>-dependent manner, suggesting that these molecules may act in concert to regulate secretory processes in plasma cells.

## REFERENCES

1. Nourse, C.R., et al. 1998. Cloning of a third member of the D52 gene family indicates alternative coding sequence usage in D52-like transcripts. *Biochim. Biophys. Acta* 1443: 155-168.
2. Byrne, J.A., et al. 1998. Identification and *in situ* hybridization mapping of a mouse TPD5211 (D53) orthologue to chromosome 10A4-B2. *Cytogenet. Cell Genet.* 81: 199-201.
3. Sathasivam, P., et al. 2001. The role of the coiled-coil motif in interactions mediated by TPD52. *Biochem. Biophys. Res. Commun.* 288: 56-61.
4. Boutros, R., et al. 2004. The tumor protein D52 family: many pieces, many puzzles. *Biochem. Biophys. Res. Commun.* 325: 1115-1121.
5. Rubin, M.A., et al. 2004. Overexpression, amplification, and androgen regulation of TPD52 in prostate cancer. *Cancer* 64: 3814-3822.
6. Tiacci, E., et al. 2005. Tumor protein D52 (TPD52): a novel B cell/plasma-cell molecule with unique expression pattern and Ca<sup>2+</sup>-dependent association with annexin VI. *Blood* 105: 2812-2820.

## CHROMOSOMAL LOCATION

Genetic locus: TPD52 (human) mapping to 8q21.13.

## SOURCE

TPD52 (A-6) is a mouse monoclonal antibody raised against amino acids 1-45 mapping at the N-terminus of TPD52 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TPD52 (A-6) is available conjugated to agarose (sc-166732 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166732 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166732 PE), fluorescein (sc-166732 FITC), Alexa Fluor® 488 (sc-166732 AF488), Alexa Fluor® 546 (sc-166732 AF546), Alexa Fluor® 594 (sc-166732 AF594) or Alexa Fluor® 647 (sc-166732 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166732 AF680) or Alexa Fluor® 790 (sc-166732 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

## RESEARCH USE

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

## APPLICATIONS

TPD52 (A-6) is recommended for detection of TPD52 of 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 TPD52 siRNA (h): sc-45341, TPD52 shRNA Plasmid (h): sc-45341-SH and TPD52 shRNA (h) Lentiviral Particles: sc-45341-V.

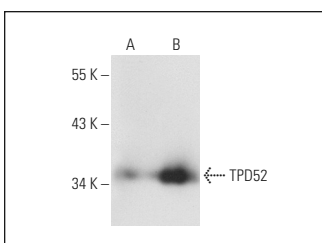
Molecular Weight of TPD52 isoforms 1/2/3: 24/20/26 kDa.

Positive Controls: TPD52 (h): 293 Lysate: sc-113261, BJAB whole cell lysate: sc-2207 or Ramos cell lysate: sc-2216.

## 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



TPD52 (A-6): sc-166732. Western blot analysis of TPD52 expression in non-transfected: sc-110760 (A) and human TPD52 transfected: sc-113261 (B) 293 whole cell lysates.

## 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](http://www.scbt.com) for detailed protocols and support products.