SANTA CRUZ BIOTECHNOLOGY, INC.

TPD52 (K-17): sc-33843

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The Power to Question

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 bound to annexin VI in a Ca^{2+}-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. 1443: 155-168.
2. Byrne, J.A., et al. 1998. Identification and *in situ* hybridization mapping of a mouse Tpd52l1 (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. 288: 56-61.
4. Boutros, R., et al. 2004. The tumor protein D52 family: many pieces, many puzzles. Biochem. 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^{2+}-dependent association with Annexin VI. Blood 105: 2812-2820.

CHROMOSOMAL LOCATION

Genetic locus: TPD52 (human) mapping to 8q21.13; Tpd52 (mouse) mapping to 3 A1.

SOURCE

TPD52 (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TPD52 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-33843 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

TPD52 (K-17) is recommended for detection of TPD52 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).

TPD52 (K-17) is also recommended for detection of TPD52 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TPD52 siRNA (h): sc-45341, TPD52 siRNA (m): sc-45342, TPD52 shRNA Plasmid (h): sc-45341-SH, TPD52 shRNA Plasmid (m): sc-45342-SH, TPD52 shRNA (h) Lentiviral Particles: sc-45341-V and TPD52 shRNA (m) Lentiviral Particles: sc-45342-V.

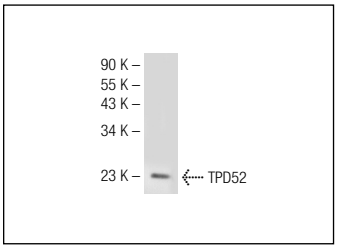
Molecular Weight of TPD52 isoforms 1/2/3: 24/20/26 kDa.

Positive Controls: mouse lymph node extract: sc-364243, BJAB whole cell lysate: sc-2207 or Ramos cell lysate: sc-2216.

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.

DATA



TPD52 (K-17): sc-33843. Western blot analysis of TPD52 expression in mouse lymph node tissue extract.

RESEARCH USE

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

MONOS Satisfaction Guaranteed

Try **TPD52 (A-6): sc-166732**, our highly recommended monoclonal alternative to TPD52 (K-17).