

TBCCD1 (D-2): sc-515156

BACKGROUND

TBCCD1 (TBCC domain containing 1) is a 557 amino acid protein that contains a C-CAP/cofactor C-like domain. The gene encoding TBCCD1 maps to chromosome 3, which is made up of about 214 million bases encoding over 1,100 genes. Notably, there is a chemokine receptor gene cluster and a variety of human cancer related loci on chromosome 3. Particular regions of the chromosome 3 short arm are deleted in many types of cancer cells. Key tumor suppressing genes on chromosome 3 encode apoptosis mediator RASSF1, cell migration regulator HYAL1 and angiogenesis suppressor SEMA3B. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

- Müller, S., et al. 2000. Molecular cytogenetic dissection of human chromosomes 3 and 21 evolution. *Proc. Natl. Acad. Sci. USA* 97: 206-211.
- Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. *Mol. Biol.* 37: 194-211.
- Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. *Genomics* 83: 193-202.
- Yue, Y., et al. 2005. Comparative cytogenetics of human chromosome 3q21.3 reveals a hot spot for ectopic recombination in hominoid evolution. *Genomics* 85: 36-47.
- Darai, E., et al. 2005. Evolutionarily plastic regions at human 3p21.3 coincide with tumor breakpoints identified by the "elimination test". *Genomics* 86: 1-12.

CHROMOSOMAL LOCATION

Genetic locus: TBCCD1 (human) mapping to 3q27.3; Tbccd1 (mouse) mapping to 16 B1.

SOURCE

TBCCD1 (D-2) is a mouse monoclonal antibody raised against amino acids 401-447 mapping within an internal region of TBCCD1 of human origin.

PRODUCT

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

TBCCD1 (D-2) is available conjugated to agarose (sc-515156 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515156 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515156 PE), fluorescein (sc-515156 FITC), Alexa Fluor® 488 (sc-515156 AF488), Alexa Fluor® 546 (sc-515156 AF546), Alexa Fluor® 594 (sc-515156 AF594) or Alexa Fluor® 647 (sc-515156 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515156 AF680) or Alexa Fluor® 790 (sc-515156 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

TBCCD1 (D-2) is recommended for detection of TBCCD1 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).

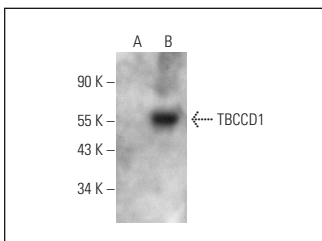
Suitable for use as control antibody for TBCCD1 siRNA (h): sc-78250, TBCCD1 siRNA (m): sc-154116, TBCCD1 shRNA Plasmid (h): sc-78250-SH, TBCCD1 shRNA Plasmid (m): sc-154116-SH, TBCCD1 shRNA (h) Lentiviral Particles: sc-78250-V and TBCCD1 shRNA (m) Lentiviral Particles: sc-154116-V.

Positive Controls: TBCCD1 transfected HEK293T whole cell lysate or NTERA-2 cl.D1 whole cell lysate: sc-364181.

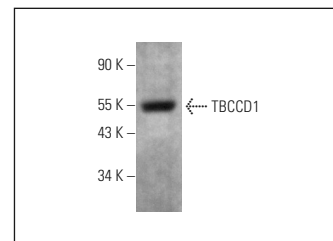
RECOMMENDED SUPPORT REAGENTS

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



TBCCD1 (D-2): sc-515156. Western blot analysis of TBCCD1 expression in non-transfected (A) and TBCCD1 transfected (B) HEK293T whole cell lysates.



TBCCD1 (D-2): sc-515156. Western blot analysis of TBCCD1 expression in NTERA-2 cl.D1 whole cell lysate.

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.