SANTA CRUZ BIOTECHNOLOGY, INC.

BTBD14A (A-7): sc-390650

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

BTBD14A (BTB/POZ domain-containing protein 14A), also known as BTBD14, is a 587 amino acid protein that contains one BTB/POZ domain. The BTB/POZ domain mediates homomeric and heteromeric POZ-POZ interactions and is common to transcriptional regulators involved in chromatin modeling. In several BTB/POZ containing proteins, including Bcl-6 and the promyelocytic leukemia zinc-finger (PLZF) oncoprotein, this domain interacts with the SMRT/N-CoR-mSin3A HDAC complex and is directly involved in repressing and silencing gene transcription. When this domain is deleted, as with the oncogenic PLZF-RAR chimera of promyelocytic leukemias, this transcriptional repression is attenuated. This suggests that BTBD14A may play a role in transcription regulation.

REFERENCES

1. Wong, C.W. and Privalsky, M.L. 1998. Components of the SMRT corepressor complex exhibit distinctive interactions with the POZ domain oncoproteins PLZF, PLZF-RARα, and BCL-6. J. Biol. Chem. 273: 27695-27702.
2. David, G., et al. 1998. Histone deacetylase associated with mSin3A mediates repression by the acute promyelocytic leukemia-associated PLZF protein. Oncogene 16: 2549-2556.

CHROMOSOMAL LOCATION

Genetic locus: NACC2 (human) mapping to 9q34.3; Nacc2 (mouse) mapping to 2 A3.

SOURCE

BTBD14A (A-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 479-512 within an internal region of BTBD14A of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

BTBD14A (A-7) is available conjugated to agarose (sc-390650 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-390650 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390650 PE), fluorescein (sc-390650 FITC), Alexa Fluor® 488 (sc-390650 AF488), Alexa Fluor® 546 (sc-390650 AF546), Alexa Fluor® 594 (sc-390650 AF594) or Alexa Fluor® 647 (sc-390650 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390650 AF680) or Alexa Fluor® 790 (sc-390650 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390650 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

BTBD14A (A-7) is recommended for detection of BTBD14A 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), 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).

BTBD14A (A-7) is also recommended for detection of BTBD14A in additional species, including equine and canine.

Suitable for use as control antibody for BTBD14A siRNA (h): sc-92557, BTBD14A siRNA (m): sc-141772, BTBD14A shRNA Plasmid (h): sc-92557-SH, BTBD14A shRNA Plasmid (m): sc-141772-SH, BTBD14A shRNA (h) Lentiviral Particles: sc-92557-V and BTBD14A shRNA (m) Lentiviral Particles: sc-141772-V.

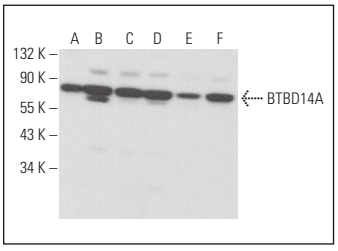
Molecular Weight of BTBD14A: 63 kDa.

Positive Controls: A2058 whole cell lysate: sc-364178, SUP-T1 whole cell lysate: sc-364796 or Jurkat whole cell lysate: sc-2204.

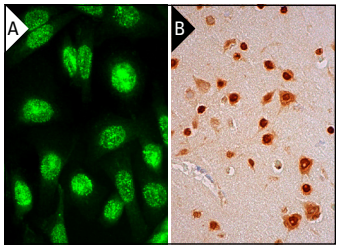
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



BTBD14A (A-7): sc-390650. Western blot analysis of BTBD14A expression in Jurkat (**A**), SK-MEL-24 (**B**), A2058 (**C**), SUP-T1 (**D**), BYDP (**E**) and NIH/3T3 (**F**) whole cell lysates.



BTBD14A (A-7): sc-390650. Immunofluorescence staining of formalin-fixed SW480 cells showing nuclear localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebral cortex tissue showing nuclear and cytoplasmic staining of neuronal cells and nuclear staining of glial cells (**B**).

RESEARCH USE

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