SANTA CRUZ BIOTECHNOLOGY, INC.

# BTBD2 (H-2): sc-393927

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

BTBD2 (BTB/POZ domain-containing protein 2) is a 525 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 BTBD2 may play a role in transcription regulation. BTBD2 is expressed as two isoforms produced by alternative splicing events and has been found to interact with Topo I and Trim5δ.

## 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. Huynh, K.D. and Bardwell, V.J. 1998. The Bcl-6 POZ domain and other POZ domains interact with the co-repressors N-CoR and SMRT. Oncogene 17: 2473-2484.
3. Ahmad, K.F., et al. 1998. Crystal structure of the BTB domain from PLZF. Proc. Natl. Acad. Sci. USA 95: 12123-12128.
4. Deltour, S., et al. 1999. Recruitment of SMRT/N-CoR-mSin3A-HDAC-repressing complexes is not a general mechanism for BTB/POZ transcriptional repressors: the case of HIC-1 and γFBP-B. Proc. Natl. Acad. Sci. USA 96: 14831-14836.
5. Carim-Todd, L., et al. 2001. Identification and characterization of BTBD1, a novel BTB domain containing gene on human chromosome 15q24. Gene 262: 275-281.


## CHROMOSOMAL LOCATION

Genetic locus: BTBD2 (human) mapping to 19p13.3; Btbd2 (mouse) mapping to 10 C1.

## SOURCE

BTBD2 (H-2) is a mouse monoclonal antibody raised against amino acids 1-43 mapping at the N-terminus of BTBD2 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.

BTBD2 (H-2) is available conjugated to agarose (sc-393927 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-393927 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393927 PE), fluorescein (sc-393927 FITC), Alexa Fluor® 488 (sc-393927 AF488), Alexa Fluor® 546 (sc-393927 AF546), Alexa Fluor® 594 (sc-393927 AF594) or Alexa Fluor® 647 (sc-393927 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393927 AF680) or Alexa Fluor® 790 (sc-393927 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

BTBD2 (H-2) is recommended for detection of BTBD2 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 BTBD2 siRNA (h): sc-97552, BTBD2 siRNA (m): sc-141775, BTBD2 shRNA Plasmid (h): sc-97552-SH, BTBD2 shRNA Plasmid (m): sc-141775-SH, BTBD2 shRNA (h) Lentiviral Particles: sc-97552-V and BTBD2 shRNA (m) Lentiviral Particles: sc-141775-V.

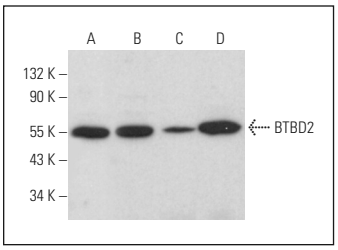
Molecular Weight of BTBD2: 56 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, MDA-MB-435 whole cell lysate or EOC 20 whole cell lysate: sc-364187.

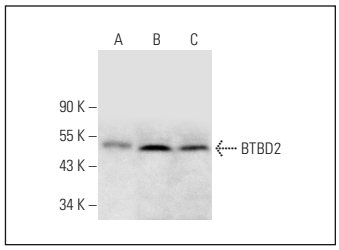
## RECOMMENDED SUPPORT REAGENTS

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




BTBD2 (H-2): sc-393927. Western blot analysis of BTBD2 expression in MCF7 (**A**), EOC 20 (**B**), WEHI-231 (**C**) and Neuro-2A (**D**) whole cell lysates.




BTBD2 (H-2): sc-393927. Western blot analysis of BTBD2 expression in human PBL (**A**), MCF7 (**B**) and MDA-MB-435 (**C**) 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.

## 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.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