

BTBD6 (W-12): sc-131885

BACKGROUND

BTBD6 (BTB/POZ domain-containing protein 6), also known as BDPL or lens BTB domain protein, is a 410 amino acid protein that contains one BTB/POZ domain and is specifically expressed in the lens. 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 BTBD6 may play a role in transcription regulation in the lens.

REFERENCES

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- Huynh, K.D., et al. 1998. The BCL-6 POZ domain and other POZ domains interact with the co-repressors N-CoR and SMRT. *Oncogene* 17: 2473-2484.
- Ahmad, K.F., et al. 1998. Crystal structure of the BTB domain from PLZF. *Proc. Natl. Acad. Sci. USA* 95: 12123-12128.
- 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 γ FBP-B. *Proc. Natl. Acad. Sci. USA* 96: 14831-14836.
- Melnick, A., et al. 2002. Critical residues within the BTB domain of PLZF and Bcl-6 modulate interaction with co-repressors. *Mol. Cell. Biol.* 22: 1804-1818.

CHROMOSOMAL LOCATION

Genetic locus: BTBD6 (human) mapping to 14q32.33; Btbd6 (mouse) mapping to 12 F1.

SOURCE

BTBD6 (W-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BTBD6 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131885 P, (100 μ g 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.

APPLICATIONS

BTBD6 (W-12) is recommended for detection of BTBD6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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); non cross-reactive with other BTBD family members.

BTBD6 (W-12) is also recommended for detection of BTBD6 in additional species, including bovine.

Suitable for use as control antibody for BTBD6 siRNA (h): sc-92292, BTBD6 siRNA (m): sc-141777, BTBD6 shRNA Plasmid (h): sc-92292-SH, BTBD6 shRNA Plasmid (m): sc-141777-SH, BTBD6 shRNA (h) Lentiviral Particles: sc-92292-V and BTBD6 shRNA (m) Lentiviral Particles: sc-141777-V.

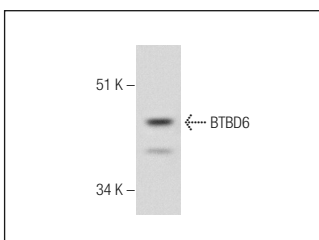
Molecular Weight of BTBD6: 46 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or MCF7 whole cell lysate: sc-2206.

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



BTBD6 (W-12): sc-131885. Western blot analysis of BTBD6 expression in MCF7 whole cell lysate.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.