

ZBTB20 (E-11): sc-515370

BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. ZBTB20 (zinc finger and BTB domain containing 20), also known as HOF, DPZF, ODA-8S or ZNF288, is a 741 amino acid protein that localizes to the nucleus and contains one BTB (POZ) domain and five C₂H₂-type zinc fingers. Expressed in thymus, spleen, lymph node and fetal liver, ZBTB20 exists as either a monomer or a homodimer that is thought to function as a transcription factor, playing a role in hematopoiesis, oncogenesis and immune responses. Multiple isoforms of ZBTB20 exist due to alternative splicing events.

REFERENCES

1. Harboe, T.L., et al. 2000. Assignment of the human zinc finger gene, ZNF288, to chromosome 3 band q13.2 by radiation hybrid mapping and fluorescence *in situ* hybridisation. *Cytogenet. Cell Genet.* 89: 156-157.
2. Zhang, W., et al. 2001. Identification and characterization of DPZF, a novel human BTB/POZ zinc finger protein sharing homology to Bcl-6. *Biochem. Biophys. Res. Commun.* 282: 1067-1073.
3. Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 606025. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Mitchelmore, C., et al. 2002. Characterization of two novel nuclear BTB/POZ domain zinc finger isoforms. Association with differentiation of hippocampal neurons, cerebellar granule cells, and macroglia. *J. Biol. Chem.* 277: 7598-7609.
5. Nielsen, J.V., et al. 2007. Hippocampus-like corticoneurogenesis induced by two isoforms of the BTB-zinc finger gene ZBTB20 in mice. *Development* 134: 1133-1140.

CHROMOSOMAL LOCATION

Genetic locus: ZBTB20 (human) mapping to 3q13.31; Zbtb20 (mouse) mapping to 16 B4.

SOURCE

ZBTB20 (E-11) is a mouse monoclonal antibody raised against amino acids 383-605 mapping within an internal region of ZBTB20 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-515370 X, 200 µg/0.1 ml.

ZBTB20 (E-11) is available conjugated to agarose (sc-515370 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515370 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515370 PE), fluorescein (sc-515370 FITC), Alexa Fluor® 488 (sc-515370 AF488), Alexa Fluor® 546 (sc-515370 AF546), Alexa Fluor® 594 (sc-515370 AF594) or Alexa Fluor® 647 (sc-515370 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515370 AF680) or Alexa Fluor® 790 (sc-515370 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

ZBTB20 (E-11) is recommended for detection of ZBTB20 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 ZBTB20 siRNA (h): sc-78021, ZBTB20 siRNA (m): sc-155438, ZBTB20 shRNA Plasmid (h): sc-78021-SH, ZBTB20 shRNA Plasmid (m): sc-155438-SH, ZBTB20 shRNA (h) Lentiviral Particles: sc-78021-V and ZBTB20 shRNA (m) Lentiviral Particles: sc-155438-V.

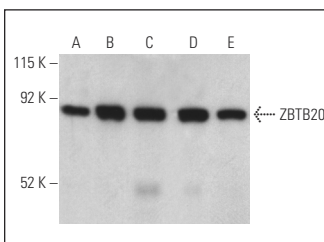
ZBTB20 (E-11) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of ZBTB20: 81 kDa.

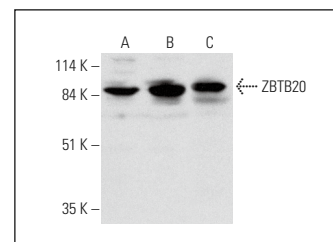
Molecular Weight (observed) of ZBTB20: 89 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, Jurkat nuclear extract: sc-2132 or human spleen extract: sc-363779.

DATA



ZBTB20 (E-11): sc-515370. Western blot analysis of ZBTB20 expression in HeLa (A) and Jurkat (B) nuclear extracts, HL-60 (C) and Jurkat (D) whole cell lysates and human spleen tissue extract (E). Detection reagent used: m-IgG₁ BP-HRP: sc-525408.



ZBTB20 (E-11): sc-515370. Western blot analysis of ZBTB20 expression in HeLa (A) and Jurkat (B) nuclear extracts and human spleen tissue extract (C).

SELECT PRODUCT CITATIONS

1. Ochi, M., et al. 2020. HBx increases EGFR expression by inhibiting miR129-5p function. *Biochem. Biophys. Res. Commun.* 529: 198-203.
2. Liu, B., et al. 2021. Circular RNA circZbtb20 maintains ILC3 homeostasis and function via Alkbh5-dependent m6A demethylation of Nr4a1 mRNA. *Cell. Mol. Immunol.* 18: 1412-1424.

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.

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