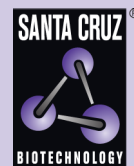


ZBED1 (H-9): sc-393684



The Power to Question

BACKGROUND

ZBED1 (zinc finger BED domain-containing protein 1), also known as ALTE (Ac-like transposable element), DREF or TRAMP, is a 694 amino acid protein that localizes specifically to granular structures within the nucleus. Expressed ubiquitously at low levels and present at higher levels in heart, placenta, spleen and skeletal muscle, ZBED1 is thought to function as a transcription factor that regulates a number of ribosomal protein (RP) encoding genes, thereby playing a role in the cell cycle and in cell proliferation events. ZBED1 contains one BED-type zinc finger and binds specifically to 5'-TGTCG[CT]GA[CT]A-3' DNA regions found in RP promoters. Additionally, ZBED1 binds strongly to the promoter region of Histone H1 (a protein required for the condensation of nucleosomes into higher order structures), subsequently activating H1 transcription.

REFERENCES

1. Oosumi, T., et al. 1995. Mariner transposons in humans. *Nature* 378: 672.
2. Nagase, T., et al. 1997. Prediction of the coding sequences of unidentified human genes. XI. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. *DNA Res.* 5: 277-286.
3. Esposito, T., et al. 1999. A novel pseudoautosomal human gene encodes a putative protein similar to Ac-like transposases. *Hum. Mol. Genet.* 8: 61-67.
4. Ohshima, N., et al. 2003. Identification of a human homologue of the DREF transcription factor with a potential role in regulation of the Histone H1 gene. *J. Biol. Chem.* 278: 22928-22938.
5. Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 300178. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: ZBED1 (human) mapping to Xp22.33/Yp11.31.

SOURCE

ZBED1 (H-9) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of ZBED1 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.

ZBED1 (H-9) is available conjugated to agarose (sc-393684 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393684 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393684 PE), fluorescein (sc-393684 FITC), Alexa Fluor® 488 (sc-393684 AF488), Alexa Fluor® 546 (sc-393684 AF546), Alexa Fluor® 594 (sc-393684 AF594) or Alexa Fluor® 647 (sc-393684 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393684 AF680) or Alexa Fluor® 790 (sc-393684 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

ZBED1 (H-9) is recommended for detection of ZBED1 of 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 ZBED1 siRNA (h): sc-91580, ZBED1 shRNA Plasmid (h): sc-91580-SH and ZBED1 shRNA (h) Lentiviral Particles: sc-91580-V.

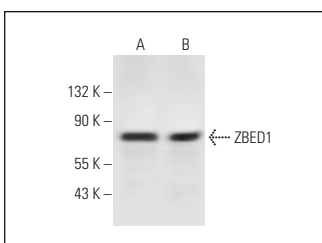
Molecular Weight of ZBED1: 86 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

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



ZBED1 (H-9): sc-393684. Western blot analysis of ZBED1 expression in Jurkat (A) and HeLa (B) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Mahpour, A., et al. 2018. A methyl-sensitive element induces bidirectional transcription in TATA-less CpG island-associated promoters. *PLoS ONE* 13: e0205608.

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.