

ZBED1 (41-R): sc-81823

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) en-coding 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 promotor region of Histone H1 (a protein required for the condensation of nucleosomes into higher order structures), subsequently activating H1 transcription.

REFERENCES

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- Yamashita, D., Komori, H., Higuchi, Y., Yamaguchi, T., Osumi, T. and Hirose, F. 2007. Human DNA replication-related element binding factor (hDREF) self-association via hATC domain is necessary for its nuclear accumulation and DNA binding. *J. Biol. Chem.* 282: 7563-7575.

CHROMOSOMAL LOCATION

Genetic locus: ZBED1 (human) mapping to Xp22.33/Yp11.32.

STORAGE

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

PROTOCOLS

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

SOURCE

ZBED1 (41-R) is a mouse monoclonal antibody raised against recombinant ZBED1 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

ZBED1 (41-R) is recommended for detection of ZBED1 of human origin by Western Blotting (starting dilution 1:200, 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.

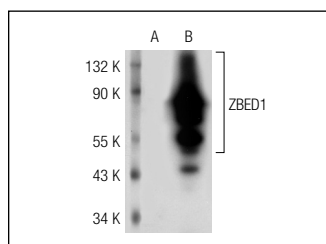
Molecular Weight of ZBED1: 86 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or ZBED1 (h): 293T Lysate: sc-111867.

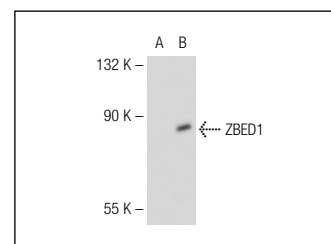
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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 goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ZBED1 (41-R): sc-81823. Western blot analysis of ZBED1 expression in non-transfected: sc-117752 (A) and human ZBED1 transfected: sc-111867 (B) 293T whole cell lysates.



ZBED1 (41-R): sc-81823. Western blot analysis of ZBED1 expression in non-transfected: sc-117752 (A) and human ZBED1 transfected: sc-172080 (B) 293T whole cell lysates.

RESEARCH USE

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