

# ZBED2 (E-16): sc-103334

## BACKGROUND

The zinc finger BED domain-containing protein family (ZBED) is comprised of ZBED1, ZBED2, ZBED3, ZBED4 and ZBED5. They each contain one BED-type zinc finger domains with the exception of ZBED4, which contain four BED-type zinc finger domains. ZBED1 is thought to function as a transcription factor that regulates a number of ribosomal protein (RP) encoded genes by binding specifically to 5'-TGTCG[CT]GA[CT]A-3' DNA regions found in RP promoters. ZBED3 is an Axin-binding protein involved in Wnt/ $\beta$ -catenin signaling modulation. ZBED4 expression has been shown in human and mouse retinas where it is thought to act as a regulatory protein in cone photoreceptors and Müller cells. The functions of ZBED2 and ZBED5 have yet to be elucidated.

## REFERENCES

- Oosumi, T., et al. 1995. Mariner transposons in humans. *Nature* 378: 672.
- Nagase, T., et al. 1998. 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.
- 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.
- 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.
- Yamashita, D., et al. 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.
- Yamashita, D., et al. 2007. hDREF regulates cell proliferation and expression of ribosomal protein genes. *Mol. Cell. Biol.* 27: 2003-2013.

## CHROMOSOMAL LOCATION

Genetic locus: ZBED2 (human) mapping to 3q13.2.

## SOURCE

ZBED2 (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZBED2 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-103334 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-103334 X, 100  $\mu$ g/0.1 ml.

## STORAGE

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

## APPLICATIONS

ZBED2 (E-16) is recommended for detection of ZBED2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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 ZBED family members.

ZBED2 (E-16) is also recommended for detection of ZBED2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for ZBED2 siRNA (h): sc-78371, ZBED2 shRNA Plasmid (h): sc-78371-SH and ZBED2 shRNA (h) Lentiviral Particles: sc-78371-V.

ZBED2 (E-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

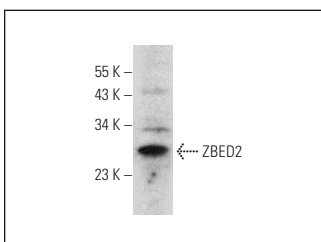
Molecular Weight of ZBED2: 25 kDa.

Positive Controls: Daoy whole cell lysate: sc-364381.

## 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



ZBED2 (E-16): sc-103334. Western blot analysis of ZBED2 expression in Daoy whole cell lysate.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.