

# ZBED4 (V-14): sc-86944

## 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

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- 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.
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- Chen, T., et al. 2009. Identification of zinc-finger BED domain-containing 3 (ZBED3) as a novel Axin-interacting protein that activates Wnt/ $\beta$ -catenin signaling. *J. Biol. Chem.* 284: 6683-6689.

## CHROMOSOMAL LOCATION

Genetic locus: ZBED4 (human) mapping to 22q13.33; Zbed4 (mouse) mapping to 15 E3.

## SOURCE

ZBED4 (V-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of ZBED4 of human origin.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## PRODUCT

Each vial contains 100  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86944 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-86944 X, 100  $\mu$ g/0.1 ml.

## APPLICATIONS

ZBED4 (V-14) is recommended for detection of ZBED4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 ZBED2.

ZBED4 (V-14) is also recommended for detection of ZBED4 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for ZBED4 siRNA (h): sc-76947, ZBED4 siRNA (m): sc-155434, ZBED4 shRNA Plasmid (h): sc-76947-SH, ZBED4 shRNA Plasmid (m): sc-155434-SH, ZBED4 shRNA (h) Lentiviral Particles: sc-76947-V and ZBED4 shRNA (m) Lentiviral Particles: sc-155434-V.

ZBED4 (V-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ZBED4: 135 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

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