SANTA CRUZ BIOTECHNOLOGY, INC.

ZBED4 (H-112): sc-292165



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 4 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 promotors. ZBED3 is an Axin-binding protein involved in Wnt/ β -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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- 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.
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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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- Saghizadeh, M., et al. 2009. ZBED4, a BED-type zinc-finger protein in the cones of the human retina. Invest. Ophthalmol. Vis. Sci. 50: 3580-3588.
- Chen, T., et al. 2009. Identification of zinc-finger BED domain-containing 3 (ZBED3) as a novel Axin-interacting protein that activates Wnt/β-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 (H-112) is a rabbit polyclonal antibody raised against amino acids 763-874 mapping within an internal region of ZBED4 of human origin.

STORAGE

Store at 4° C, **D0 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.

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-292165 X, 200 $\mu g/0.1$ ml.

APPLICATIONS

ZBED4 (H-112) 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), immunoprecipitation [1-2 μ g per 100-500 μ 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).

ZBED4 (H-112) is also recommended for detection of ZBED4 in additional species, including equine, canine, bovine, porcine 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 (H-112) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ZBED4: 135 kDa.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.