

ZEB1 (H-102): sc-25388

BACKGROUND

ZEB1 (also designated Zfh1, for zinc finger homeodomain enhancer-binding protein, δ EF1, AREB6, BZP and NIL-2A) is a non-receptor transcription factor analogous to the *Drosophila* ZFH-1 protein. ZEB1 contains two separate zinc-finger domains (ZD1 and ZD2), which are essential for DNA binding and repression, and a homeodomain (HD), which is not. ZEB1 also contains three repression domains, two of which flank ZD1, and a third located between HD and ZD2. ZEB1 represses transcription by site competition and enhancer silencing mechanisms, as well as by interacting with corepressors through its repression domains. Interaction of ZEB1 with the TSH β gene T3-response element may play a role in the modification of gene-specific regulation by thyroid hormones. In the embryo, ZEB1 is primarily expressed in the mesoderm, but changes in the level of expression during tissue maturation suggest a role for ZEB1 in the early histogenesis of mesodermal tissues. In addition to its role as an embryonic gene regulator, ZEB1 is also involved in regulating the development of certain skeletal structures.

CHROMOSOMAL LOCATION

Genetic locus: ZEB1 (human) mapping to 10p11.22; Zeb1 (mouse) mapping to 18 A1.

SOURCE

ZEB1 (H-102) is a rabbit polyclonal antibody raised against amino acids 39-140 of ZEB1 of human origin.

PRODUCT

Each vial contains 200 μ g 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-25388 X, 200 μ g/0.1 ml., agarose conjugate for immunoprecipitation, sc-25388 AC, 500 μ g/0.25 ml agarose in 1 ml. and HRP conjugate for Western blotting, sc-25388 HRP, 200 μ g/1 ml.

APPLICATIONS

ZEB1 (H-102) is recommended for detection of ZEB1 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).

ZEB1 (H-102) is also recommended for detection of ZEB1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ZEB1 siRNA (h): sc-38643, ZEB1 siRNA (m): sc-38644, ZEB1 shRNA Plasmid (h): sc-38643-SH, ZEB1 shRNA Plasmid (m): sc-38644-SH, ZEB1 shRNA (h) Lentiviral Particles: sc-38643-V and ZEB1 shRNA (m) Lentiviral Particles: sc-38644-V.

ZEB1 (H-102) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular weight of ZEB1: 124 kDa.

SELECT PRODUCT CITATIONS

- Zhao, L.J., et al. 2006. Changes in C-terminal binding protein 2 (CtBP2) corepressor complex induced by E1A and modulation of E1A transcriptional activity by CtBP2. *J. Biol. Chem.* 281: 36613-36623.
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- Graham, T.R., et al. 2008. Insulin-like growth factor-I-dependent up-regulation of ZEB1 drives epithelial-to-mesenchymal transition in human prostate cancer cells. *Cancer Res.* 68: 2479-2488.
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- de Souza Rocha Simonini, P., et al. 2010. Epigenetically deregulated microRNA-375 is involved in a positive feedback loop with estrogen receptor α in breast cancer cells. *Cancer Res.* 70: 9175-9184.
- Lin, Z., et al. 2010. Differential expression of the miR-200 family microRNAs in epithelial and B cells and regulation of Epstein-Barr virus reactivation by the miR-200 family member miR-429. *J. Virol.* 84: 7892-7897.
- Ellis, A.L., et al. 2010. Either ZEB1 or ZEB2/SIP1 can play a central role in regulating the Epstein-Barr virus latent-lytic switch in a cell-type-specific manner. *J. Virol.* 84: 6139-6152.
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- Deep, G., et al. 2011. Role of E-cadherin in antimigratory and antiinvasive efficacy of silibinin in prostate cancer cells. *Cancer Prev. Res.* 4: 1222-1232.
- Sánchez-Tilló, E., et al. 2011. β -catenin/TCF4 complex induces the epithelial-to-mesenchymal transition (EMT)-activator ZEB1 to regulate tumor invasiveness. *Proc. Natl. Acad. Sci. USA* 108: 19204-19209.

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.


 MONOS
 Satisfation
 Guaranteed

Try **ZEB1 (416A7H10): sc-81428**, our highly recommended monoclonal alternative to ZEB1 (H-102).