

ZEB1 Antibody

Catalog # ASC11157

Product Information

Application	WB, IF, ICC, E
Primary Accession	P37275
Other Accession	NP_110378 , 55957123
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	124074
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	ZEB1 antibody can be used for detection of ZEB1 by Western blot at 1 μ g/mL. Antibody can also be used for immunocytochemistry starting at 20 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	6935
Other Names	Zinc finger E-box-binding homeobox 1, NIL-2-A zinc finger protein, Negative regulator of IL2, Transcription factor 8, TCF-8, ZEB1, AREB6, TCF8
Target/Specificity	ZEB1; Multiple isoforms of ZEB1 are known to exist.
Reconstitution & Storage	ZEB1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	ZEB1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ZEB1 (HGNC:11642)
Function	Acts as a transcriptional repressor. Inhibits interleukin-2 (IL-2) gene expression. Enhances or represses the promoter activity of the ATP1A1 gene depending on the quantity of cDNA and on the cell type. Represses E-cadherin promoter and induces an epithelial-mesenchymal transition (EMT) by recruiting SMARCA4/BRG1. Represses BCL6 transcription in the presence of the corepressor CTBP1. Positively regulates neuronal differentiation. Represses RCOR1 transcription activation during neurogenesis. Represses transcription by binding to the E box (5'-CANNTG-3'). In the absence of TGF β 1, acts as a repressor of COL1A2 transcription via binding to the E-box in the

upstream enhancer region (By similarity).

Cellular Location

Nucleus

Tissue Location

Colocalizes with SMARCA4/BRG1 in E-cadherin- negative cells from established lines, and stroma of normal colon as well as in de-differentiated epithelial cells at the invasion front of colorectal carcinomas (at protein level). Expressed in heart and skeletal muscle, but not in liver, spleen, or pancreas

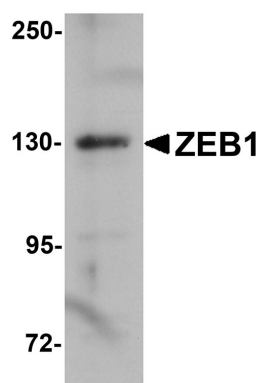
Background

ZEB1 Antibody: ZEB1, initially identified as the delta-crystallin enhancer binding protein delta EF1, is a DNA-binding protein that binds to a modified E-box sequence and has been implicated in postgastrulation embryogenesis. ZEB1 binds to the promoter of several hemopoietic genes, including interleukin-2, CD4, GATA-3, and alpha-integrin, and mice in which ZEB1 has been targeted show thymic atrophy, and severe defects in lymphocyte differentiation. Recent evidence suggests that ZEB1 also regulates the accumulation of adipose tissue and may play a role in obesity. Mutations in this gene have been associated with late-onset Fuchs endothelial corneal dystrophy.

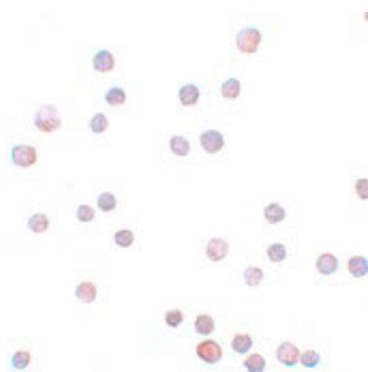
References

Funahashi J, Sekido R, Murai K, et al. Delta-crystallin enhancer protein delta EF1 is a zinc finger-homeodomain protein implicated in postgastrulation embryogenesis. *Dev.*1993; 119:433-46.
Postigo AA and Dean DC. Independent repressor domains in ZEB regulate muscle and T-cell differentiation. *Mol. Cell Biol.*1999; 19:7961-71.
Saykally JN, Dogan S, Cleary MP, et al. The ZEB1 transcription factor is a novel repressor of adiposity in female mice. *PLoS One*2009; 4:e8460.
Mehta JS, Vithana EN, Tan DT, et al. Analysis of the posterior polymorphous corneal dystrophy 3 gene, TCF8, in late-onset Fuchs endothelial corneal dystrophy. *Invest. Ophthalmol. Vis. Sci.*2008; 49:184-8.

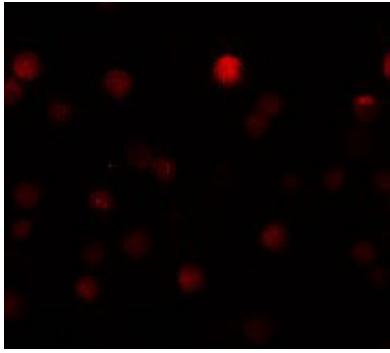
Images



Western blot analysis of ZEB1 in HeLa cell lysate with ZEB1 antibody at 1 µg/mL.



Immunocytochemistry of ZEB1 in HeLa cells with ZEB1 antibody at 20 µg/mL.



Immunofluorescence of ZEB1 in HeLa cells with ZEB1 antibody at 20 $\mu\text{g/mL}$.

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