

ZEB1 Antibody

Catalog # ASC11157

Specification

ZEB1 Antibody - Product Information

Application WB, IHC-P, IF, ICC, E Primary Accession P37275

Other Accession <u>NP_110378</u>, <u>6935</u>

Reactivity
Host
Clonality
Polyclonal
Isotype
Human
Rabbit
Polyclonal

Calculated MW Predicted: 124 kDa

Observed: 130 kDa KDa

Application Notes

ZEB1 antibody can be used for detection of
ZEB1 by Western blot at 1 µg/mL. Antibody
can also be used for immunocytochemistry

starting at 20 µg/mL and

immunohistochemistry starting at 5 $\mu g/mL$. For immunofluorescence start at 20 $\mu g/mL$.

ZEB1 Antibody - Additional Information

Gene ID **6935**

Target/Specificity

ZEB1 antibody was raised against a 15 amino acid synthetic peptide near the center of human ZEB1.

Str>The immunogen is located within amino acids 530 - 580 of ZEB1.

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.

ZEB1 Antibody - 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 TGFB1, 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

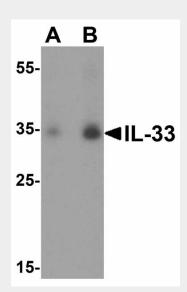
Colocalizes with SMARCA4/BRG1 in E-cadherin- negative cells from established lines, and stroma of normal colon as well as in de-differentiated epithelial cells at the invasion front of colorectal carcinomas (at protein level). Expressed in heart and skeletal muscle, but not in liver, spleen, or pancreas

ZEB1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

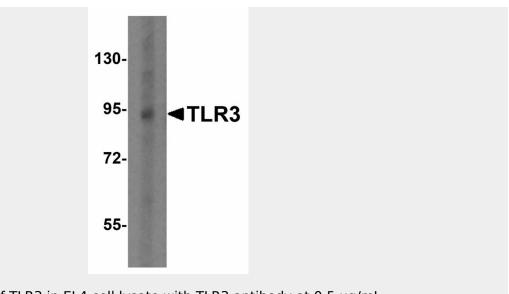
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ZEB1 Antibody - Images



Western blot analysis of IL-33 in A-20 cell lysate with IL-33 antibody at (A) 1 and (B) 2 µg/mL.





Western blot analysis of TLR3 in EL4 cell lysate with TLR3 antibody at 0.5 $\mu g/mL$.

ZEB1 Antibody - 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 hemapoietic 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.

ZEB1 Antibody - 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 One2009; 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. Opthalmol. Vis. Sci.2008; 49:184-8.