

#### **ZEB1 Antibody**

Purified Mouse Monoclonal Antibody Catalog # AO1849a

# **Specification**

## **ZEB1 Antibody - Product Information**

Application WB, IHC, FC, ICC, E

Primary Accession
Reactivity
Host
Clonality
Isotype
P37275
Human
Mouse
Monoclonal
IgG1

Calculated MW 124kDa KDa

**Description** 

This gene encodes a zinc finger transcription factor. The encoded protein likely plays a role in transcriptional repression of interleukin 2. Mutations in this gene have been associated with posterior polymorphous corneal dystrophy-3 and late-onset Fuchs endothelial corneal dystrophy. Alternatively spliced transcript variants encoding different isoforms have been described.

#### **Immunogen**

Purified recombinant fragment of human ZEB1 (AA: 967-1108) expressed in E. Coli.

## **Formulation**

Purified antibody in PBS with 0.05% sodium azide

## **ZEB1 Antibody - 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

#### **Dilution**

WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000

#### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## **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** 

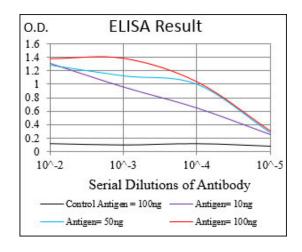
#### **Tissue Location**

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
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture





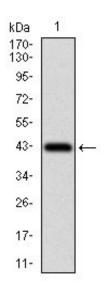


Figure 1: Western blot analysis using ZEB1 mAb against human ZEB1 recombinant protein. (Expected MW is 41.7 kDa)

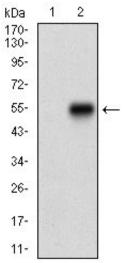


Figure 2: Western blot analysis using ZEB1 mAb against HEK293 (1) and ZEB1 (AA: 967-1108)-hlgGFc transfected HEK293 (2) cell lysate.

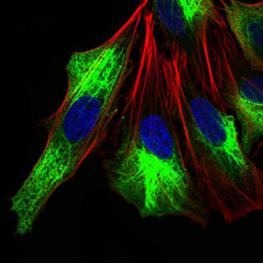


Figure 3: Immunofluorescence analysis of Hela cells using ZEB1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



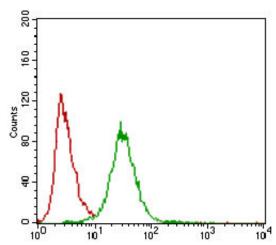


Figure 4: Flow cytometric analysis of Hela cells using ZEB1 mouse mAb (green) and negative control (red).

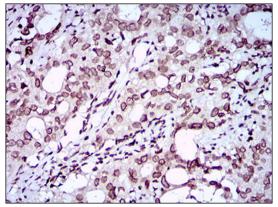


Figure 5: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using ZEB1 mouse mAb with DAB staining.

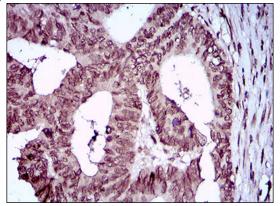


Figure 6: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using ZEB1 mouse mAb with DAB staining.

# **ZEB1 Antibody - Background**

This gene encodes a zinc finger transcription factor. The encoded protein likely plays a role in transcriptional repression of interleukin 2. Mutations in this gene have been associated with posterior polymorphous corneal dystrophy-3 and late-onset Fuchs endothelial corneal dystrophy. Alternatively spliced transcript variants encoding different isoforms have been described.;;;

# **ZEB1 Antibody - References**



1. J Cancer Res Clin Oncol. 2012 Aug;138(8):1329-38. 2. Mol Cell Biochem. 2012 Jul;366(1-2):223-9.