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ZEB1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1850a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	P37275
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2A8H3
Isotype	IgG1
Calculated MW	124074
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

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.

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

Background

CD22 may be involved in the localization of B-cells in lymphoid tissues. Binds sialylated glycoproteins; one of which is CD45. Preferentially binds to alpha-2,6-linked sialic acid. The sialic acid recognition site can be masked by cis interactions with sialic acids on the same cell surface. Upon ligand induced tyrosine phosphorylation in the immune response seems to be involved in regulation of B-cell antigen receptor signaling. Plays a role in positive regulation through interaction with Src family tyrosine kinases and may also act as an inhibitory receptor by recruiting cytoplasmic phosphatases via their SH2 domains that block signal transduction through dephosphorylation of signaling molecules ;

References

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

Images

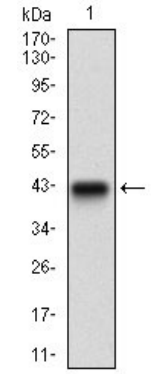


Figure 1: Western blot analysis using ZEB1 mAb against human ZEB1 recombinant protein. (Expected MW is 41.7 kDa)

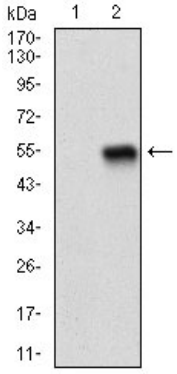


Figure 2: Western blot analysis using ZEB1 mAb against HEK293 (1) and ZEB1 (AA: 967-1108)-hIgGFc transfected HEK293 (2) cell lysate.

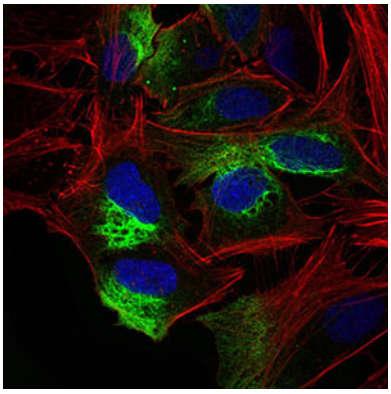


Figure 3: Immunofluorescence analysis of Hela cells using ZEB1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

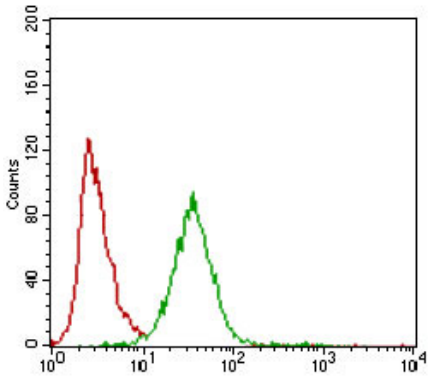


Figure 4: Flow cytometric analysis of Hela cells using ZEB1 mouse mAb (green) and negative control (red).

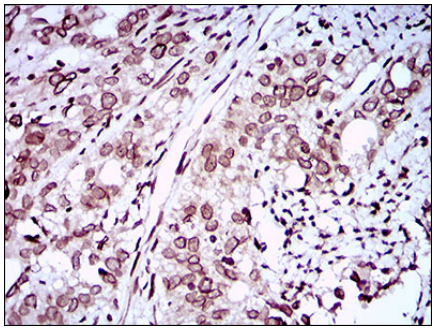


Figure 5: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using ZEB1 mouse mAb with DAB staining.

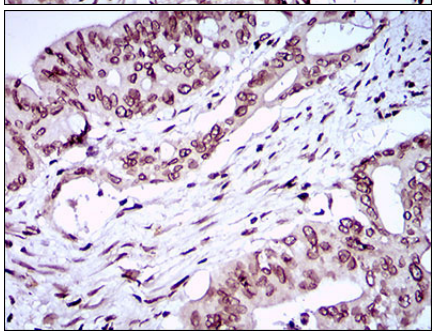


Figure 6: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using ZEB1 mouse mAb with DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.