

Product datasheet

Anti-ZEB1 antibody [2A8A6] ab181451

KO VALIDATED

[19 References](#) [7 Images](#)

Overview

Product name	Anti-ZEB1 antibody [2A8A6]
Description	Mouse monoclonal [2A8A6] to ZEB1
Host species	Mouse
Tested applications	Suitable for: ICC/IF, Flow Cyt, IHC-P, WB
Species reactivity	Reacts with: Human, Recombinant fragment
Immunogen	Recombinant fragment corresponding to Human ZEB1 aa 967-1108. Expressed in <i>E. coli</i> . Sequence: KRFS HSGSYSQHMN HRYSYCKREA EERDSTEQEE AGPEILSNEH VGARASPSQG DSDERESLTR EEDEDSEKEE EEEDKEMEEL QEEKECEKPQ GDEEEEEEEEE EEEEEVEEA ENEGEEAKTE GLMKDDRAES QASSLGQK Database link: P37275 Run BLAST with Run BLAST with
Positive control	WB: Human ZEB1 recombinant protein and HAP1 cell lysate. IHC-P: Human cervical cancer and rectum cancer tissues. ICC/IF: HeLa cells. Flow Cyt: HeLa cells.
General notes	This product was changed from ascites to supernatant. Lot no's high than GR224480-10 are from Tissue Culture Supernatant The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide Constituent: 99% PBS 0.5% protein stabilizer consisting of amino acid =85% pH(1% water solution) =7.0~7.5 Water =2% As(mg/kg) =0.5 Pb(mg/kg) =0.1
Purity	Protein G purified
Purification notes	Purified from tissue culture supernatant.
Clonality	Monoclonal
Clone number	2A8A6
Isotype	IgG1

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab181451 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/200 - 1/1000.
Flow Cyt		1/200 - 1/400. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
IHC-P		1/200 - 1/1000.
WB		1/500 - 1/2000. Predicted molecular weight: 124 kDa.

Target

Function	Inhibits interleukin-2 (IL-2) gene expression. May be responsible for transcriptional repression of the IL-2 gene. 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. Promotes tumorigenicity by repressing stemness-inhibiting microRNAs.
Tissue specificity	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.
Involvement in disease	Defects in ZEB1 are the cause of posterior polymorphous corneal dystrophy type 3 (PPCD3) [MIM:609141]. PPCD is a rare disease involving metaplasia and overgrowth of corneal endothelial cells. In patients with PPCD, these cells manifest in an epithelial morphology and gene expression pattern, produce an aberrant basement membrane, and, sometimes, spread over the iris and nearby structures in a way that increases the risk for glaucoma.

Defects in ZEB1 are the cause of corneal dystrophy Fuchs endothelial type 6 (FECD6) [MIM:613270]. It is an ocular disorder caused by loss of endothelium of the central cornea. It is characterized by focal wart-like guttata that arise from Descemet membrane and develop in the central cornea, epithelial blisters, reduced vision and pain. Descemet membrane is thickened by abnormal collagenous deposition.

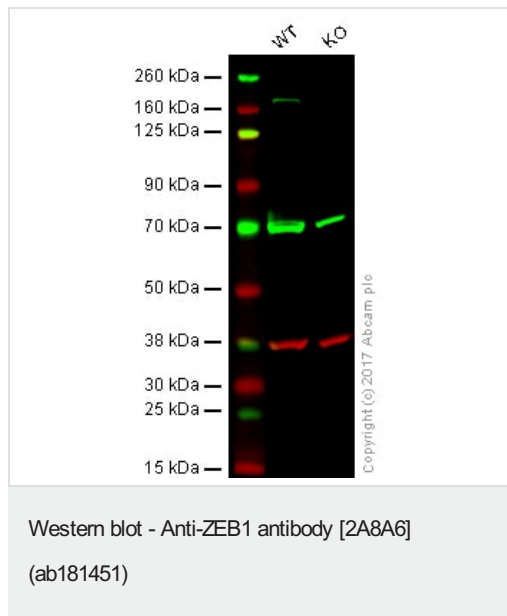
Sequence similarities

Belongs to the delta-EF1/ZFH-1 C2H2-type zinc-finger family.
 Contains 7 C2H2-type zinc fingers.
 Contains 1 homeobox DNA-binding domain.

Cellular localization

Nucleus.

Images

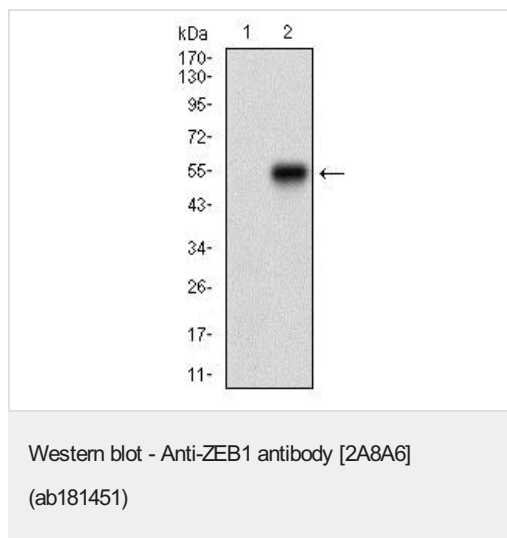


Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

Lane 2: ZEB1 knockout HAP1 whole cell lysate (20 µg)

Lanes 1 - 2: Merged signal (red and green). Green - ab181451 observed at 200 kDa. Red - loading control, **ab181602**, observed at 37 kDa.

ab181451 was shown to recognize ZEB1 in wild-type HAP1 cells as signal was lost at the expected MW in ZEB1 knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and ZEB1 knockout samples were subjected to SDS-PAGE. Ab181451 and **ab181602** (Rabbit anti-GAPDH loading control) were incubated overnight at 4°C at 1/500 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed **ab216772** and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed **ab216777** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

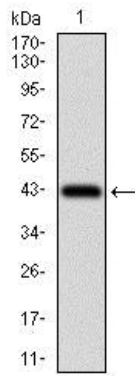


All lanes : Anti-ZEB1 antibody [2A8A6] (ab181451) at 1/500 dilution

Lane 1 : HEK293 cell lysate

Lane 2 : KEB1 (AA: 967-1108)-hlgGFc transfected HEK293 cell lysate

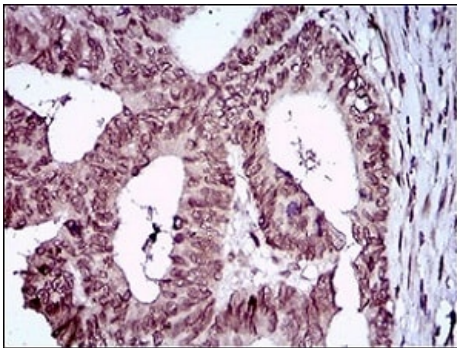
Predicted band size: 124 kDa



Western blot - Anti-ZEB1 antibody [2A8A6]
(ab181451)

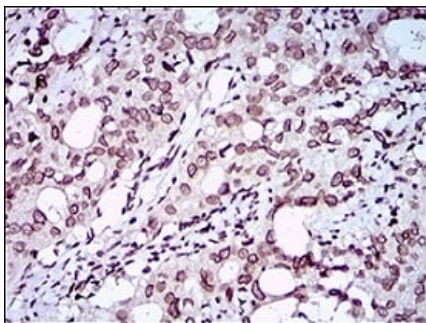
Anti-ZEB1 antibody [2A8A6] (ab181451) at 1/500 dilution + ZEB1 recombinant protein fragment (Expected MW is 41.7 kDa)

Predicted band size: 124 kDa



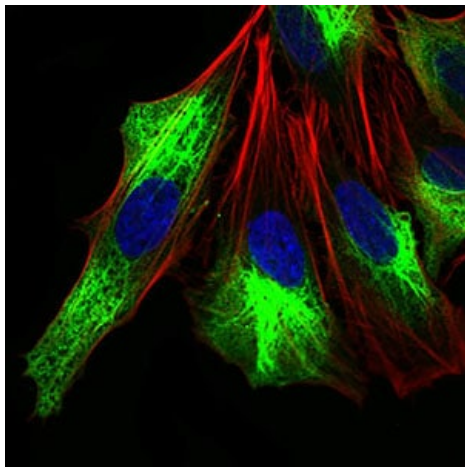
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ZEB1 antibody [2A8A6]
(ab181451)

Immunohistochemical analysis of paraffin-embedded Human rectum cancer tissue labeling ZEB1 with ab181451 at 1/200 dilution.



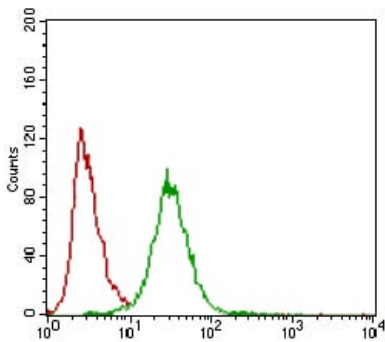
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ZEB1 antibody [2A8A6]
(ab181451)

Immunohistochemical analysis of paraffin-embedded Human cervical cancer tissue labeling ZEB1 with ab181451 at 1/200 dilution.



Immunofluorescence analysis of HeLa cells labeling ZEB1 (green) with ab181451 at 1/200 dilution. Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

Immunocytochemistry/ Immunofluorescence - Anti-ZEB1 antibody [2A8A6] (ab181451)



Flow cytometric analysis of HeLa cells labeling ZEB1 (green) with ab181451 at 1/200 dilution. Negative control (red).

Flow Cytometry - Anti-ZEB1 antibody [2A8A6] (ab181451)

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