abcam

ab276129

Anti-ZEB1 antibody [BLR102H]

Recombinant | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 8.2 Preservative: 0.09% Sodium azide Constituents: 98% Borate buffered saline, 0.1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Synthetic Peptide within Human ZEB1 aa 1050 to C-terminus. The exact immunogen used to generate this antibody is proprietary information. Database link P37275
Clone number	BLR102H
Purity	Tissue culture supernatant

Reactivity data

IP

Tested

Species	Human
Dilution info	-
Notes	20 µl/mg lysate

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1 µL for 10^6 Cells
Notes	-

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information ZEB1

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).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

REACH authorisation
Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.
It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

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Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	ZEB1 also known as δEF1 is a zinc finger E-box-binding homeobox protein with a molecular weight of approximately 124 kDa. It acts as a transcription factor and plays an important role in the regulation of gene expression by binding to specific DNA sequences. ZEB1 is mainly expressed in epithelial and mesenchymal cells and is involved in a variety of developmental processes during embryogenesis. Its broad expression pattern reflects its versatile function in different tissues and cell types.
Biological function summary	ZEB1 modulates cellular differentiation and identity by repressing and activating target genes. This protein is particularly notable for its involvement in the

	epithelial-to-mesenchymal transition (EMT) an important biological process for development and wound healing. ZEB1 doesn't act alone; it forms complexes with other transcription factors and co-repressors such as SMAD and CtBP enhancing its regulatory reach. Through these interactions ZEB1 influences cell adhesion molecules and cytoskeletal components facilitating cell motility and invasion.
Pathways	ZEB1 is integral to the TGF-β signaling pathway influencing cellular responses to growth factors. It also intersects with the Wnt signaling pathway linking it to cellular proliferation and differentiation. Through these pathways ZEB1 interacts with other significant proteins including β-catenin and SMAD proteins which collaboratively regulate gene expression that affects cell phenotype and behavior.
Associated diseases and disorders	The dysregulation of ZEB1 is associated with a variety of pathological conditions including cancer and fibrotic diseases. In cancer ZEB1 contributes to tumor progression and metastasis by promoting EMT a process that enables epithelial cells to acquire mesenchymal traits enhancing their migratory capabilities. This mechanism links ZEB1 to the expression of vimentin and the suppression of E-cadherin important markers in cancer prognosis. Additionally in fibrotic disorders ZEB1's interaction with TGF-β signaling promotes pathological tissue remodeling impacting fibrosis development in organs like the liver and lungs.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

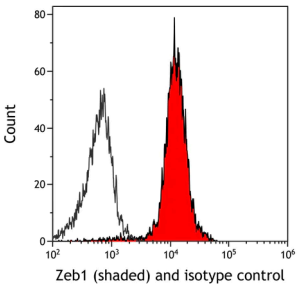
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

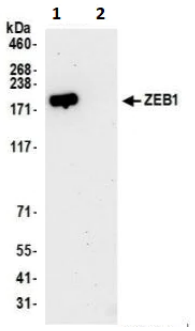
Full details and terms and conditions can be found here:
Terms & Conditions.

5 product images



Flow Cytometry - Anti-ZEB1 antibody [BLR102H] (ab276129)

Flow cytometry overlay histogram of 4% formaldehyde fixed Jurkat cells permeabilized with 90% methanol labeling human Zeb1 with ab276129 at 1 µl per 1 x 10^6 cells (shaded) compared with a Isotype control (unshaded). Secondary antibody details: DyLight® 488-conjugated goat anti-rabbit IgG (ab96883).

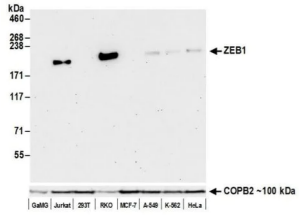


Immunoprecipitation - Anti-ZEB1 antibody [BLR102H] (ab276129)

ZEB1 was immunoprecipitated from 20 µl/mg HEK-293T whole cell lysate, prepared using NETN lysis buffer. ab276129 was used for IP at 1:1000 (Lane 1). Control IgG (Lane 2).
Chemiluminescence with an exposure time of 30 seconds.

All lanes:
Immunoprecipitation - Anti-ZEB1 antibody [BLR102H] (ab276129)

Predicted band size: 124 kDa



Western blot - Anti-ZEB1 antibody [BLR102H] (ab276129)

Chemiluminescence with an exposure time of 30 seconds.
Lower Panel: Rabbit anti-COPB2 antibody

All lanes:
Western blot - Anti-ZEB1 antibody [BLR102H] (ab276129) at 1/1000 dilution

Lane 1:
GaMG whole cell lysate at 50 µg

Lane 2:
Jurkat whole cell lysate at 50 µg

Lane 3:
HEK-293T whole cell lysate at 50 µg

Lane 4:
RKO whole cell lysate at 50 µg

Lane 5:
MCF-7 whole cell lysate at 50 µg

Lane 6:
A549 whole cell lysate at 50 µg

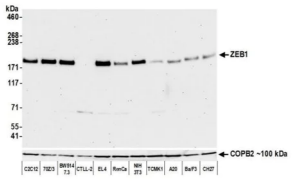
Lane 7:
K562 whole cell lysate at 50 µg

Lane 8:
HeLa whole cell lysate at 50 µg

Secondary

All lanes:
HRP-conjugated goat anti-rabbit IgG

Predicted band size: 124 kDa



Western blot - Anti-ZEB1 antibody [BLR102H] (ab276129)

Chemiluminescence with an exposure time of 30 seconds.
Lower Panel: Rabbit anti-COPB2 antibody.

All lanes:
Western blot - Anti-ZEB1 antibody [BLR102H] (ab276129) at 1/1000 dilution

Lane 1:
C2C12 whole cell lysate at 50 µg

Lane 2:
70Z/3 whole cell lysate at 50 µg

Lane 3:
BW5147.3 whole cell lysate at 50 µg

Lane 4:
CTLL-2 whole cell lysate at 50 µg

Lane 5:
EL4 whole cell lysate at 50 µg

Lane 6:
RenCa whole cell lysate at 50 µg

Lane 7:
NIH/3T3 whole cell lysate at 50 µg

Lane 8:
TCMK-1 whole cell lysate at 50 µg

Lane 9:
A20 whole cell lysate at 50 µg

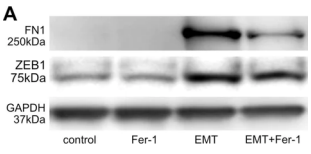
Lane 10:
Ba/F3 whole cell lysate at 50 µg

Lane 11:
CH27 whole cell lysate at 50 µg

Secondary

All lanes:
HRP-conjugated goat anti-rabbit IgG

Predicted band size: 124 kDa



Western blot - Anti-ZEB1 antibody [BLR102H] (ab276129)

ZEB1 western blot using anti-ZEB1 antibody [BLR102H] ab276129. Publication image and figure legend from You, W., Azuma, K., et al., 2024, Sci Rep, PubMed 39020017.

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ab276129 was used in this publication in western blot. This may not be the same as the application(s) guaranteed by Abcam. For a full list of applications guaranteed by Abcam for ab276129 please see the product overview.

Fer-1 suppresses EMT-induced upregulation in the expressions of fibronectin and ZEB1 in ARPE-19 cells. (A) Representative western blot images of fibronectin (FN1), ZEB1, and inner control GAPDH. (B) Quantification adjusted to GAPDH of the western blot images, and comparisons among the four groups. (C) Relative mRNA levels of fibronectin and ZEB1 in the four groups. Data is presented by mean ± SD; n = 3 per group; **P ≤ 0.01, ****P ≤ 0.0001, ns not significant.

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