

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ZEB1 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 639914
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human ZEB1 Glu430-Ser575 Accession # P37275
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

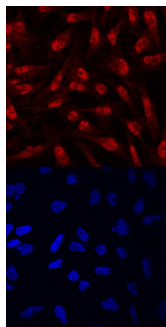
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
Immunocytochemistry	8-25 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

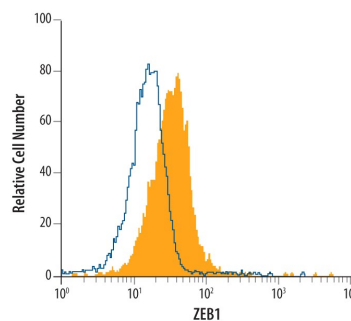
DATA

Immunocytochemistry



ZEB1 in MDA-MB-231 Human Cell Line. ZEB1 was detected in immersion fixed MDA-MB-231 human breast cancer cell line using Mouse Anti-Human ZEB1 Monoclonal Antibody (Catalog # MAB6708) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red, upper panel; Catalog # NL007) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei and cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Flow Cytometry



Detection of ZEB-1 in MDA-MB-231 Human Cell Line by Flow Cytometry
MDA-MB-231 human breast cancer cell line was stained with Mouse Anti-Human ZEB1 Monoclonal Antibody (Catalog # MAB6708, filled histogram) or isotype control antibody (Catalog # MAB002, open histogram), followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Zinc finger E-box-binding homeobox 1 (ZEB1; also transcription factor 8 (TCF-8)) is a 124 kDa member of the delta-EF1/ZFH-1 C2H2-type zinc finger family. Human ZEB1 is 1124 amino acids (aa) in length. The protein contains seven C2H2-type zinc fingers and one homeobox DNA-binding domain. In addition, there are eight phosphoserines and one phosphothreonine. Residues 989-1124 make up a glutamine-rich area. Within aa 430-575, human ZEB1 shares 84% and 82% aa sequence identity with mouse and rat ZEB1, respectively. The protein is expressed in heart and skeletal muscle, and defects in ZEB1 are the cause of posterior polymorphous corneal dystrophy type 3, a rare disease involving metaplasia and overgrowth of the corneal endothelial cells.