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ZEB2 Antibody

Catalog # ASC11158

Product Information

Application	WB, IF, ICC, E
Primary Accession	O60315
Other Accession	AAI27103, 117558786
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	136447
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	ZEB2 antibody can be used for detection of ZEB2 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunocytochemistry starting at 20 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	9839
Other Names	Zinc finger E-box-binding homeobox 2, Smad-interacting protein 1, SMADIP1, Zinc finger homeobox protein 1b, ZEB2, KIAA0569, SIP1, ZFHX1B, ZFX1B
Target/Specificity	ZEB2; ZEB2 antibody is predicted to not cross-react with ZEB1.
Reconstitution & Storage	ZEB2 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	ZEB2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ZEB2 (HGNC:14881)
Function	Transcriptional inhibitor that binds to DNA sequence 5'- CACCT-3' in different promoters (PubMed:16061479, PubMed:20516212). Represses transcription of E-cadherin (PubMed:16061479). Represses expression of MEOX2 (PubMed:20516212).
Cellular Location	Nucleus. Chromosome

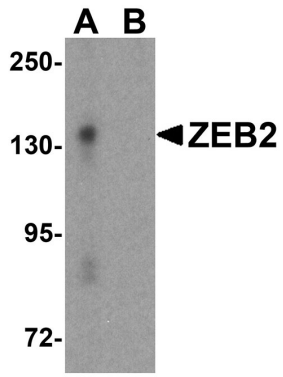
Background

ZEB2 Antibody: ZEB2, initially identified as Smad interacting-protein 1, is normally located in the nucleus and functions as a DNA-binding transcriptional repressor that interacts with activated SMADs. Like the homologous ZEB1, ZEB2 inhibits the transcription of the E-cadherin gene and induces epithelial-mesenchymal transition, a genetic program controlling cell migration during embryonic development and wound healing, in vitro. ZEB2 can also protect cells from DNA damage-induced apoptosis, suggesting that its expression may contribute to tumor progression. Recent evidence has shown that ZEB2 is often observed in the cytoplasm in numerous cancer tissues, indicating that its localization may be regulated in normal and tumor tissues. Mutations in this gene are also associated with Hirschsprung disease/Mowat-Wilson syndrome.

References

Comjin J, Berx G, Vermassen P, et al. The two-handed E box binding zinc finger protein SIP1 down regulates E-cadherin and induces invasion. Mol. Cell2001; 7:1267-78.
Sayan AE, Griffiths TR, Pal R, et al. SIP1 protein protects cells from DNA damage-induced apoptosis and has independent prognostic value in bladder cancer. Proc. Natl. Acad. Sci. USA2009; 106:14884-9.
Oztas E, Avci ME, Ozcan A, et al. Novel monoclonal antibodies detect Smad-interacting protein 1 (SIP1) in the cytoplasm of human cells from multiple tumor tissue arrays. Exp. Mol. Pathol.2010; epub
Wakamatsu N, Yamada Y, Yamada K, et al. Mutations in SIP1, encoding Smad interacting protein-1, cause a form of Hirschsprung disease. Nat. Genet.2001; 27:369-70.

Images

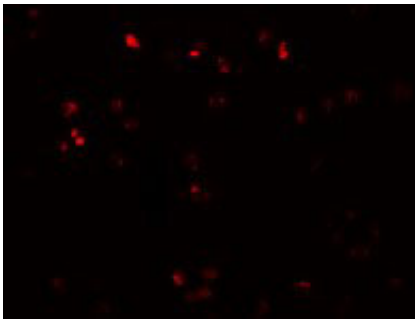


Western blot analysis of ZEB2 in EL4 cell lysate with ZEB2 antibody at 1 µg/mL in (A) the absence and (B) the presence of blocking peptide.



Immunocytochemistry of ZEB2 in Jurkat cells with ZEB2 antibody at 20 µg/mL.

Immunofluorescence of ZEB2 in Jurkat cells with ZEB2 antibody at 20 µg/mL.



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