

# ZEB2 Antibody

Catalog # ASC11158

## Specification

# ZEB2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

WB, IF, ICC, E <u>O60315</u> <u>AAI27103</u>, <u>117558786</u> Human, Mouse, Rat Rabbit Polyclonal IgG Predicted: 134 kDa

Observed: 135 kDa KDa ZEB2 antibody can be used for detection of ZEB2 by Western blot at 1 - 2  $\mu$ g/mL. Antibody can also be used for immunocytochemistry starting at 20  $\mu$ g/mL. For immunofluorescence start at 20  $\mu$ g/mL.

**Application Notes** 

# ZEB2 Antibody - Additional Information

Gene ID 9839 Target/Specificity ZEB2; ZEB2 antibody is predicted to not cross-react with ZEB1.

#### **Reconstitution & Storage**

ZEB2 antibody can be stored at 4°C for three months and -20°C, 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.

# ZEB2 Antibody - Protein Information

#### Name ZEB2 (<u>HGNC:14881</u>)

#### Function

Transcriptional inhibitor that binds to DNA sequence 5'- CACCT-3' in different promoters (PubMed:<a href="http://www.uniprot.org/citations/16061479" target="\_blank">16061479</a>, PubMed:<a href="http://www.uniprot.org/citations/20516212" target="\_blank">20516212</a>). Represses transcription of E-cadherin (PubMed:<a href="http://www.uniprot.org/citations/16061479" target="\_blank">16061479</a>). Represses expression of MEOX2 (PubMed:<a href="http://www.uniprot.org/citations/20516212" target="\_blank">20516212</a>). Represses transcription of E-cadherin (PubMed:<a href="http://www.uniprot.org/citations/16061479" target="\_blank">16061479</a>). Represses expression of MEOX2 (PubMed:<a href="http://www.uniprot.org/citations/20516212" target="\_blank">20516212</a>).



Cellular Location Nucleus. Chromosome

### **ZEB2 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### ZEB2 Antibody - Images



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



Immunocytochemistry of ZEB2 in Jurkat cells with ZEB2 antibody at 20  $\mu$ g/mL.





Immunofluorescence of ZEB2 in Jurkat cells with ZEB2 antibody at 20  $\mu$ g/mL.

# ZEB2 Antibody - 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.

# ZEB2 Antibody - 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.