

CPTC-ZEB1-2 (CAB079943)

Uniprot ID: [P37275](#)

Protein name: ZEB1_HUMAN

Full name: Zinc finger E-box-binding homeobox 1

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.

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'). Promotes tumorigenicity by repressing stemness-inhibiting microRNAs.

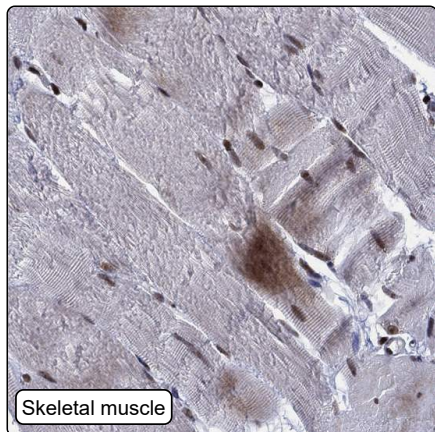
Subcellular location:

Nucleus (*experimental evidence*)

Protein existence: Experimental evidence at protein level

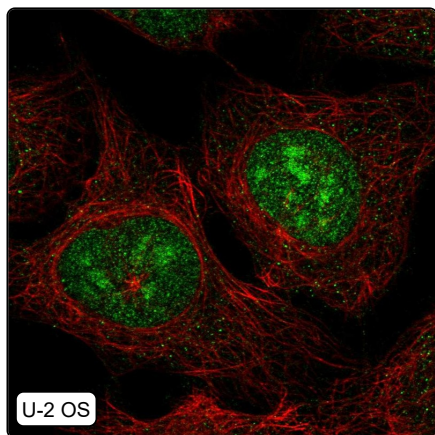
Comment:

Immunohistochemistry



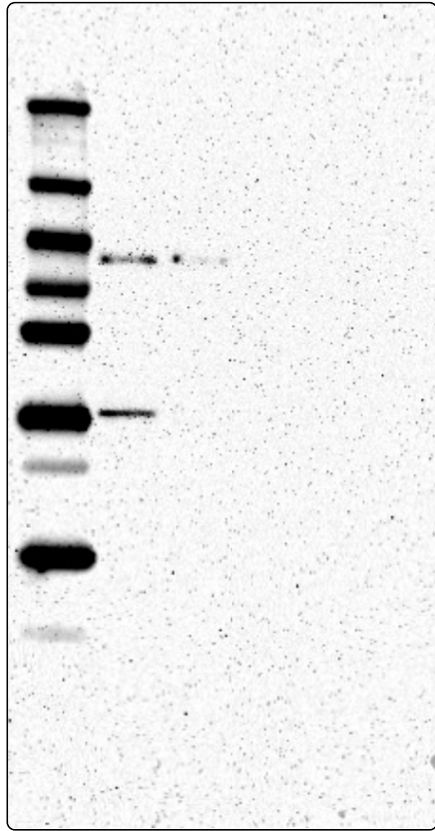
IHC protocol:	HIER pH6, Dilution 1:300
IHC test staining:	Moderate nuclear positivity in several tissues with varying intensity. Additional cytoplasmic positivity in few tissues.
Literature conformance:	Partly consistent with extensive gene/protein characterization data
Literature significance:	
RNA consistency:	Mainly not consistent with RNA expression data
IHC Sibling similarity:	Other antibody shows partly similar IHC staining pattern

Immunofluorescence



IF Overlay:	antibody (green), anti-tubuline (red) and DAPI (blue)
IF main location:	Nucleoli - 3: Supportive (auto) Nucleoplasm - 3: Supportive (auto)
IF additional location:	
IF Antibody score:	Supportive
IF in A549:	Nucleoli
IF in RH-30:	Nucleoplasm
IF in U-2 OS:	Nucleoplasm Nucleoli

Western blot



WB Size markers (kDa):	250, 130, 100, 70, 55, 35, 25, 15, 10
WB Lanes:	Marker (1), RT4 (2), U-251 MG (3), Plasma (4), Liver (5), Tonsil (6)
WB Target weight (kDa):	30, 31, 33, 33, 117, 122, 122, 124, 124
WB Validation:	Supported (Band of predicted size in kDa (+/-20%) with additional bands present.)