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SNAI2 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1390a

Product Information

Application	WB, E
Primary Accession	O43623
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2H5
Isotype	IgG1
Calculated MW	29986
Description	This gene encodes a member of the Snail family of C2H2-type zinc finger transcription factors. The encoded protein acts as a transcriptional repressor that binds to E-box motifs and is also likely to repress E-cadherin transcription in breast carcinoma. This protein is involved in epithelial-mesenchymal transitions and has antiapoptotic activity.The tumor suppressor protein p53 induces Slug expression in γ-irradiated cells; Slug protects damaged cells from apoptosis by repressing p53-induced transcription of the proapoptotic Bcl-2 family protein Puma. Mutations in this gene may be associated with sporatic cases of neural tube defects.
Immunogen	Purified recombinant fragment of human SNAI2 expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	6591
Other Names	Zinc finger protein SNAI2, Neural crest transcription factor Slug, Protein snail homolog 2, SNAI2, SLUG, SLUGH
Dilution	WB~~1/500 - 1/2000 E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SNAI2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SNAI2
Synonyms	SLUG, SLUGH
Function	Transcriptional repressor that modulates both activator- dependent and basal transcription. Involved in the generation and migration of neural crest cells. Plays a role in mediating RAF1-induced transcriptional repression of the TJ protein, occludin (OCLN) and subsequent oncogenic transformation of epithelial cells (By similarity). Represses BRCA2 expression by binding to its E2-box- containing silencer and recruiting CTBP1 and HDAC1 in breast cells. In epidermal keratinocytes, binds to the E-box in ITGA3 promoter and represses its transcription. Involved in the regulation of ITGB1 and ITGB4 expression and cell adhesion and proliferation in epidermal keratinocytes. Binds to E-box2 domain of BSG and activates its expression during TGFB1-induced epithelial-mesenchymal transition (EMT) in hepatocytes. Represses E-Cadherin/CDH1 transcription via E-box elements. Involved in osteoblast maturation. Binds to RUNX2 and SOC9 promoters and may act as a positive and negative transcription regulator, respectively, in osteoblasts. Binds to CXCL12 promoter via E-box regions in mesenchymal stem cells and osteoblasts. Plays an essential role in TWIST1-induced EMT and its ability to promote invasion and metastasis.
Cellular Location	Nucleus. Cytoplasm. Note=Observed in discrete foci in interphase nuclei. These nuclear foci do not overlap with the nucleoli, the SP100 and the HP1 heterochromatin or the coiled body, suggesting SNAI2 is associated with active transcription or active splicing regions
Tissue Location	Expressed in most adult human tissues, including spleen, thymus, prostate, testis, ovary, small intestine, colon, heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Not detected in peripheral blood leukocyte. Expressed in the dermis and in all layers of the epidermis, with high levels of expression in the basal layers (at protein level). Expressed in osteoblasts (at protein level). Expressed in mesenchymal stem cells (at protein level) Expressed in breast tumor cells (at protein level)

References

1. Biochem J. 2008 Dec 1;416(2):179-87. 2. Mol Biol Cell. 2008 Nov;19(11):4875-87. 3. Am J Pathol. 2009 Jun;174(6):2107-15.

Images

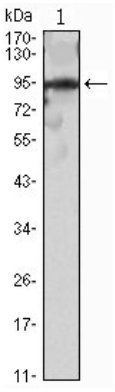


Figure 1: Western blot analysis using SNAI2 mouse mAb against SNAI2(AA: 1-128)-hIgGFc transfected HEK293 cell lysate.

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