

SNAI2 / SLUG Antibody (Internal) Rabbit Polyclonal Antibody

Catalog # ALS11445

# Specification

# SNAI2 / SLUG Antibody (Internal) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, IHC <u>O43623</u> Human, Mouse Rabbit Polyclonal 30kDa KDa

# SNAI2 / SLUG Antibody (Internal) - Additional Information

Gene ID 6591

**Other Names** Zinc finger protein SNAI2, Neural crest transcription factor Slug, Protein snail homolog 2, SNAI2, SLUG, SLUGH

Target/Specificity 13 amino acid peptide from near the center of human Slug

**Reconstitution & Storage** Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

**Precautions** SNAI2 / SLUG Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

# SNAI2 / SLUG Antibody (Internal) - 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**

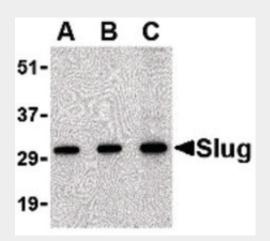
Expressed in most adult human tissues, including spleen, thymus, prostate, testis, ovary, small intestine, colon, heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Not detected in peripheral blood leukocyte. Expressed in the dermis and in all layers of the epidermis, with high 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)

### SNAI2 / SLUG Antibody (Internal) - Protocols

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

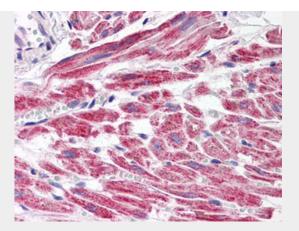
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### SNAI2 / SLUG Antibody (Internal) - Images

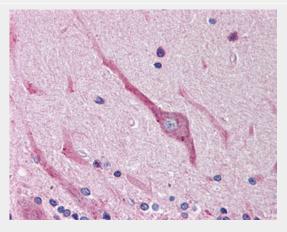


Western blot of Slug in 293 cell lysate with Slug antibody at in (A) 0.5, (B) 1 and (C) 2 ug/ml.





Anti-SNAI2 / SLUG antibody IHC of human heart.



Anti-SNAI2 / SLUG antibody IHC of human brain, cerebellum.

# SNAI2 / SLUG Antibody (Internal) - Background

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 RAF1induced transcriptional repression of the TJ protein, occludin (OCLN) and subsequent oncogenic transformation of epithelial cells (By similarity). Represses BRCA2 expression by binding to its E2box-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.

# SNAI2 / SLUG Antibody (Internal) - References

Hemavathy K., et al.Mol. Cell. Biol. 20:5087-5095(2000). Cohen M.E., et al.Genomics 51:468-471(1998). Stegmann K., et al.Mutat. Res. 406:63-69(1999). Ota T., et al.Nat. Genet. 36:40-45(2004). Totoki Y., et al.Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases.