

# SLUG Polyclonal Antibody

Catalog # AP63515

### **Product Information**

| Application       | WB, IHC-P         |
|-------------------|-------------------|
| Primary Accession | <u>043623</u>     |
| Reactivity        | Human, Mouse, Rat |
| Host              | Rabbit            |
| Clonality         | Polyclonal        |
| Calculated MW     | 29986             |

#### **Additional Information**

| Gene ID            | 6591   |
|--------------------|--|
| Other Names        | SNAI2; SLUG; SLUGH; Zinc finger protein SNAI2; Neural crest transcription factor Slug; Protein snail homolog 2 |
| Dilution           | WB~~WB: 1:500-1000 IHC: 1:200-500 IHC-P~~N/A   |
| Format             | PBS, pH 7.4, containing 0.09% (W/V) sodium azide as Preservative and 50%<br>Glycerol.                          |
| Storage Conditions | -20°C  |

## **Protein Information**

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

## 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 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.

#### Images



Western blot analysis of 1) MCF7, 2) Mouse Heart Tissue, 3) Rat Heart Tissue, 4) Rat Brain Tissue using SLUG Polyclonal Antibody.. Secondary antibody was diluted at 1:20000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).

Immunohistochemical analysis of paraffin-embedded human Breast caricnoma using SLUG Polyclonal Antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.