

### **Anti-SLUG Picoband Antibody**

Catalog # ABO12129

### **Specification**

# **Anti-SLUG Picoband Antibody - Product Information**

Application WB, IHC
Primary Accession O43623
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Zinc finger protein SNAI2(SNAI2) detection. Tested with WB, IHC-P in Human; Mouse; Rat.

#### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## **Anti-SLUG Picoband Antibody - Additional Information**

#### **Gene ID** 6591

#### **Other Names**

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

#### Calculated MW 29986 MW KDa

#### **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Mouse, Rat, Human, By Heat<br/>br>Western blot, 0.1-0.5 μg/ml, Human, Mouse<br/>
br>

#### **Subcellular Localization**

Nucleus. Cytoplasm. 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 Specificity**

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).

## **Protein Name**

Zinc finger protein SNAI2



#### **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

## **Immunogen**

A synthetic peptide corresponding to a sequence in the middle region of human SLUG (116-148aa KLSDPHAIEAEKFQCNLCNKTYSTFSGLAKHKQ), identical to the related mouse and rat sequences.

#### **Purification**

Immunogen affinity purified.

## **Cross Reactivity**

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

#### **Sequence Similarities**

Belongs to the snail C2H2-type zinc-finger protein family.

# **Anti-SLUG Picoband Antibody - 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)

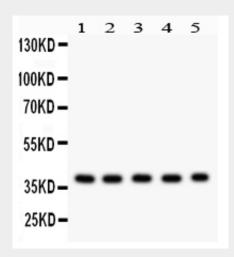


## **Anti-SLUG Picoband Antibody - Protocols**

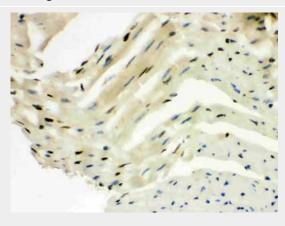
Provided below are standard protocols that you may find useful for product applications.

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

## **Anti-SLUG Picoband Antibody - Images**

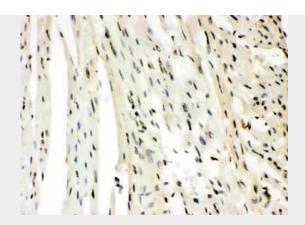


Anti- SLUG Picoband antibody, ABO12129, Western blottingAll lanes: Anti SLUG (ABO12129) at 0.5ug/mlLane 1: Mosue Kidney Tissue Lysate at 50ugLane 2: Mouse Lung Tissue Lysate at 50ugLane 3: Mouse Spleen Tissue Lysate at 50ugLane 4: Mouse Brain Tissue Lysate at 50ugLane 5: MCF-7 Whole Cell Lysate at 40ugPredicted bind size: 30KDObserved bind size: 39KD



Anti- SLUG Picoband antibody, ABO12129,IHC(P)IHC(P): Mouse Cardiac Muscle Tissue





Anti- SLUG Picoband antibody, ABO12129,IHC(P)IHC(P): Rat Cardiac Muscle Tissue

# **Anti-SLUG Picoband Antibody - Background**

SLUG is also known as SNAI2. 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. Mutations in this gene may be associated with sporatic cases of neural tube defects.