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SLUG Antibody (N-term K9)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2053b

Specification

SLUG Antibody (N-term K9) - Product Information

Application	**WB,E**
Primary Accession	O43623
Other Accession	O08954, P97469, Q3MHQ4
Reactivity	**Human**
Predicted	**Bovine, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**1-30**

SLUG Antibody (N-term K9) - 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
This SLUG antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human SLUG.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
SLUG Antibody (N-term K9) is for research use only and not for use in diagnostic or therapeutic procedures.

SLUG Antibody (N-term K9) - Protein Information

Name SNAI2

Synonyms SLUG, SLUGH

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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)

SLUG Antibody (N-term K9) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SLUG Antibody (N-term K9) - Images

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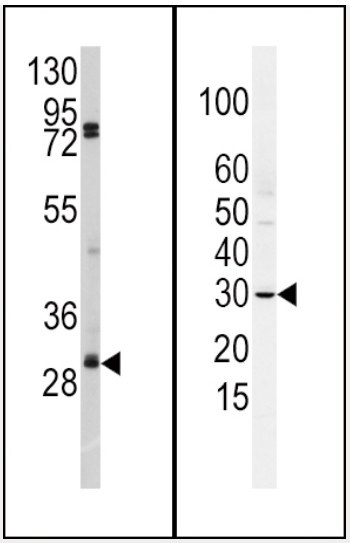

(LEFT)Western blot analysis of anti-SLUG Antibody (N-term K9) Pab (Cat.#AP2053b) in A2058 cell line lysates (35ug/lane). SLUG(arrow) was detected using the purified Pab.(RIGHT)Western blot analysis of SLUG Antibody (N-term K9) (Cat.#AP2053b) in HCSMC cell line lysates (35ug/lane).SLUG (arrow) was detected using the purified Pab.

SLUG Antibody (N-term K9) - Background

SLUG is a member of the Snail family of C2H2-type zinc finger transcription factors. This 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 the gene encoding SLUG may be associated with sporadic cases of neural tube defects.

SLUG Antibody (N-term K9) - References

Sanchez-Martin, M., et al., Hum. Mol. Genet. 11(25):3231-3236 (2002).
Hajra, K.M., et al., Cancer Res. 62(6):1613-1618 (2002).
Hemavathy, K., et al., Mol. Cell. Biol. 20(14):5087-5095 (2000).
Inukai, T., et al., Mol. Cell 4(3):343-352 (1999).
Cohen, M.E., et al., Genomics 51(3):468-471 (1998).

SLUG Antibody (N-term K9) - Citations

- Androgen receptor inhibits epithelial-mesenchymal transition, migration, and invasion of PC-3 prostate cancer cells.
- miR-33a suppresses the nuclear translocation of β-catenin to enhance gemcitabine sensitivity in human pancreatic cancer cells.
- Hepatocyte growth factor activates Wnt pathway by transcriptional activation of LEF1 to facilitate tumor invasion.
- The postnatal accumulation of junctional E-cadherin is inversely correlated with the capacity for supporting cells to convert directly into sensory hair cells in mammalian balance organs.
- Ubiquitin ligase cullin 7 induces epithelial-mesenchymal transition in human choriocarcinoma cells.