Anti-SNAIL Antibody

ER1706-22

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse
Applications:	WB, IF-cell-Cell, IHC-P
Molecular Wt:	29 kDa, additional band 35 kDa

Description: The Snail family of developmental regulatory proteins is a group of widely conserved zinc-finger proteins that regulate transcription and include the mammalian proteins SLUG, SNAI 1, the human homolog of Drosophila SNAIL, and Smuc. SNAI 1 and SLUG are expressed in placenta and adult heart, liver, and skeletal muscle. SNAI 1, and the corresponding mouse homolog Sna, each contain three classic zinc fingers and one atypical zinc finger, while SLUG contains five zinc finger regions and a transcriptional repression domain at the amino terminus, which enables SLUG to act as a negative regulator of gene expression. SLUG is implicated in the generation and migration of neural crest cells in human embryos and also contributes to limb bud development. In addition, SLUG also constitutes a cellular anti-apoptotic transcription factor that effectively prevents apoptosis in murine pro-B cells deprived of IL-3. The Snail-related gene from murine skeletal muscle cells, Smuc, is highly expressed in skeletal muscle and thymus and can, likewise, repress gene transcription. Smuc preferentially associates with CAGGTG and CACCTG E-box motifs (CANNTG) on DNA and involves the five putative DNA-binding zinc finger domains at the C-terminal region of Smuc.

Immunogen: Synthetic peptide within human SNAIL aa 1-49/264.

Positive control: Human kidney tissue, SiHa, K562, HUVEC, LOVO, human tonsil tissue, human liver cancer tissue, mouse testis tissue.

Subcellular location: Nucleus. Cytoplasm.

Database links: SwissProt: O95863 Human | Q02085 Mouse

Recommended Dilutions:

WB	1:500-1:1,000
IF-cell-Cell	1:50-1:100
IHC-P	1:50-1:200

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Immunogen affinity purified.

Images

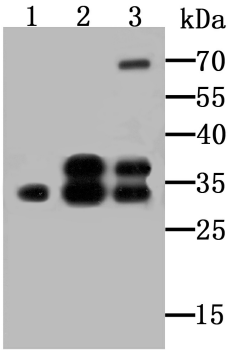

Fig1: Western blot analysis of SNAI1 on different lysates using anti-SNAI1 antibody at 1/500 dilution.
Positive control:
Lane 1: Human kidney tissue
Lane 2: SiHa
Lane 3: K562

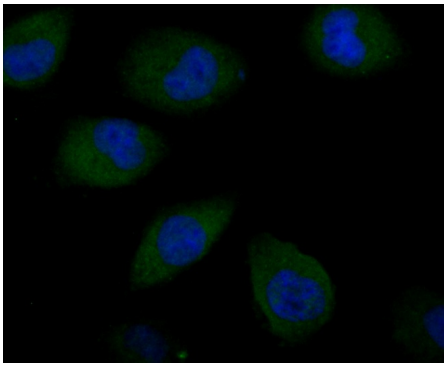

Fig2: ICC staining SNAI1 in HUVEC cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

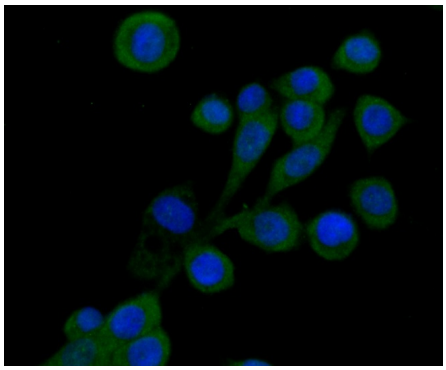

Fig3: ICC staining SNAI1 in LOVO cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

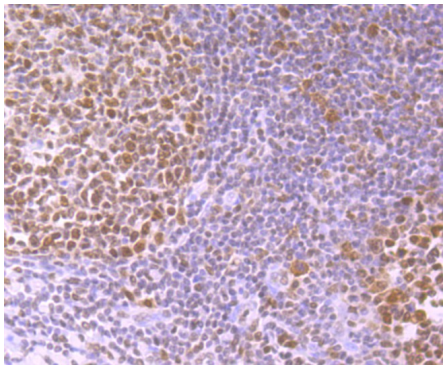

Fig4: Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-SNAI1 antibody. Counter stained with hematoxylin.

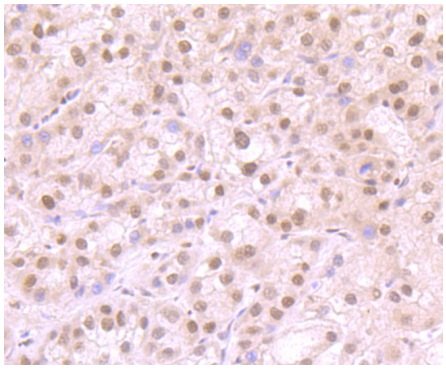

Fig5: Immunohistochemical analysis of paraffin-embedded human liver cancer tissue using anti-SNAI1 antibody. Counter stained with hematoxylin.

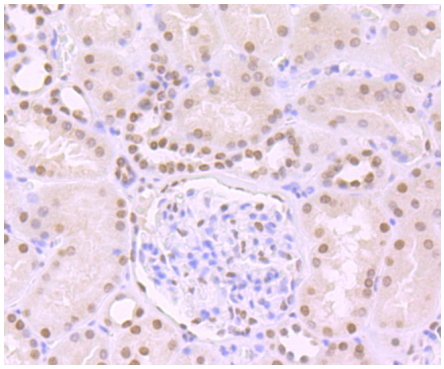

Fig6: Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-SNAI1 antibody. Counter stained with hematoxylin.

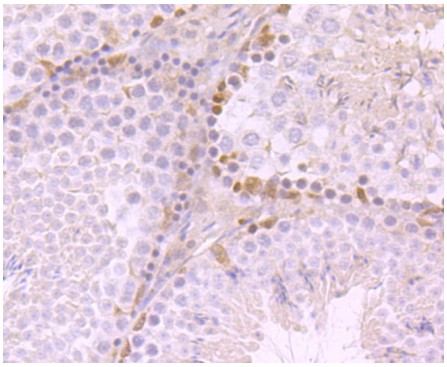

Fig7: Immunohistochemical analysis of paraffin-embedded mouse testis tissue using anti-SNAI1 antibody. Counter stained with hematoxylin.

Background References

1. Liu PF et al. Vimentin is a potential prognostic factor for tongue squamous cell carcinoma among five epithelial-mesenchymal transition-related proteins. PLoS One 12:e0178581 (2017).
2. Yu CP et al. FoxM1 promotes epithelial-mesenchymal transition of hepatocellular carcinoma by targeting Snai1. Mol Med Rep 16(4):5181-5188 (2017).