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Goat anti-Snail homolog 1 / SNAI1, Biotinylated Antibody

Peptide-affinity purified goat antibody
Catalog # AF4429a

Specification

Goat anti-Snail homolog 1 / SNAI1, Biotinylated Antibody - Product Information

Application	**WB, IHC, Pep-ELISA**
Primary Accession	O95863
Other Accession	NP_005976.2
Reactivity	**Human, Mouse, Rat**
Host	**Goat**
Clonality	**Polyclonal**
Calculated MW	**29083**

Goat anti-Snail homolog 1 / SNAI1, Biotinylated Antibody - Additional Information

Gene ID 6615

Other Names
SNAI1; snail family transcriptional repressor 1; SLUGH2; SNA; SNAH; SNAIL; SNAIL1; dJ710H13.1; protein sna; protein snail homolog 1; snail 1 homolog; snail 1 zinc finger protein; snail 1, zinc finger protein; snail family zinc finger 1; snail homolog 1

Dilution
WB~~1:1000
IHC~~1:100~500
Pep-ELISA~~N/A

Format
Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat anti-Snail homolog 1 / SNAI1, Biotinylated Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat anti-Snail homolog 1 / SNAI1, Biotinylated Antibody - Protein Information

Name SNAI1

Synonyms SNAH

Function

Involved in induction of the epithelial to mesenchymal transition (EMT), formation and maintenance of embryonic mesoderm, growth arrest, survival and cell migration (PubMed:10655587, PubMed:15647282, PubMed:20389281, PubMed:20562920, PubMed:21952048, PubMed:25827072). Binds to 3 E-boxes of the E-cadherin/CDH1 gene promoter and to the promoters of CLDN7 and KRT8 and, in association with histone demethylase KDM1A which it recruits to the promoters, causes a decrease in dimethylated H3K4 levels and represses transcription (PubMed:10655587, PubMed:20389281, PubMed:20562920). The N-terminal SNAG domain competes with histone H3 for the same binding site on the histone demethylase complex formed by KDM1A and RCOR1, and thereby inhibits demethylation of histone H3 at 'Lys-4' (in vitro) (PubMed:20389281, PubMed:21300290, PubMed:23721412). During EMT, involved with LOXL2 in negatively regulating pericentromeric heterochromatin transcription (PubMed:16096638). SNAI1 recruits LOXL2 to pericentromeric regions to oxidize histone H3 and repress transcription which leads to release of heterochromatin component CBX5/HP1A, enabling chromatin reorganization and acquisition of mesenchymal traits (By similarity). Associates with EGR1 and SP1 to mediate tetradecanoyl phorbol acetate (TPA)-induced up-regulation of CDKN2B, possibly by binding to the CDKN2B promoter region 5'-TCACA-3 (PubMed:20121949). In addition, may also activate the CDKN2B promoter by itself (PubMed:20121949).

Cellular Location
Nucleus. Cytoplasm. Note=Once phosphorylated (probably on Ser-107, Ser-111, Ser-115 and Ser-119) it is exported from the nucleus to the cytoplasm where subsequent phosphorylation of the destruction motif and ubiquitination involving BTRC occurs.

Tissue Location
Expressed in a variety of tissues with the highest expression in kidney. Expressed in mesenchymal and epithelial cell lines.

Goat anti-Snail homolog 1 / SNAI1, Biotinylated Antibody - 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

Goat anti-Snail homolog 1 / SNAI1, Biotinylated Antibody - Images