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Anti-SNAI1 / SNAIL-1 Antibody (aa215-264)

Rabbit Anti Human Polyclonal Antibody
Catalog # ALS17946

Product Information

Application	WB, IHC-P, E
Primary Accession	O95863
Predicted	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	29083

Additional Information

Gene ID	6615
Alias Symbol	SNAI1
Other Names	SNAI1, DJ710H13.1, Protein sna, SNAIL, Snail 1, Snail 1, zinc finger protein, Snail homolog 1 (Drosophila), SNA, Snail 1 homolog, Protein snail homolog 1, SNAH, Snail 1 zinc finger protein, Zinc finger protein SNAI1, SLUGH2, SNAIL1
Target/Specificity	SNAI1 Antibody detects endogenous levels of total SNAI1 protein.
Reconstitution & Storage	Immunoaffinity purified
Precautions	Anti-SNAI1 / SNAIL-1 Antibody (aa215-264) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

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