Anti-SNAI1 Antibody

Description	The Drosophila embryonic protein snail is a zinc finger transcriptional repressor which downregulates the expression of ectodermal genes within the mesoderm. The nuclear protein encoded by this gene is structurally similar to the Drosophila snail protein, and is also thought to be critical for mesoderm formation in the developing embryo. At least two variants of a similar processed pseudogene have been found on chromosome 2.

Model	STJ114189
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	IHC
Immunogen	A synthetic peptide corresponding to a sequence within amino acids 200 to the C-terminus of human SNAI1 (NP_005976.2).
Gene ID	6615
Gene Symbol	SNAI1
Dilution range	IHC 1:50 - 1:100
Tissue Specificity	Expressed in a variety of tissues with the highest expression in kidney, Expressed in mesenchymal and epithelial cell lines
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Zinc finger protein SNAI1 Protein snail homolog 1 Protein sna
Molecular Weight	29.083 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:11128OMIM:604238Reactome:R-HSA-8943724
Alternative Names	Zinc finger protein SNAI1 Protein snail homolog 1 Protein sna
Function	Involved in induction of the epithelial to mesenchymal transition (EMT), formation and maintenance of embryonic mesoderm, growth arrest, survival and cell migration, 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, During EMT, involved with LOXL2 in negatively regulating pericentromeric heterochromatin transcription , 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 , 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, In addition, may also activate the CDKN2B promoter by itself,
Cellular Localization	Nucleus, Cytoplasm,
Post-translational Modifications	Phosphorylated by GSK3B, Once phosphorylated, it becomes a target for BTRC ubiquitination, Phosphorylation by CSNK1E, probably at Ser-104, provides the priming site for the subsequent phosphorylation by GSK3B, probably at Ser-100 and Ser-96, Phosphorylation by PAK1 may modulate its transcriptional activity by promoting increased accumulation in the nucleus, Phosphorylation at Ser-11 and Ser-92 positively regulates its functions in induction of EMT and cell survival, respectively, Phosphorylation by LATS2, upon mitotic stress, oncogenic stress or Hippo pathway activation, occurs in the nucleus and promotes nuclear retention and stabilization of total cellular protein level,