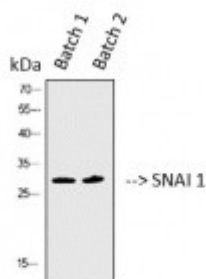


Anti-SNAI 1 antibody



Western Blot (WB) analysis of 3T3 cell lysate using SNAI 1 antibody (STJ95716) from 2 batches.



Description

SNAI 1 is a protein encoded by the SNAI1 gene which is approximately 29 kDa. SNAI 1 is localised to the cytoplasm and nucleus. It is involved in the development HGF signalling pathway and embryonic and induced pluripotent stem cell differentiation pathways and lineage-specific markers. It plays a role in the induction of the epithelial to mesenchymal transition, formation and maintenance of embryonic mesoderm, growth arrest, survival and cell migration. It 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, causes a decrease in dimethylated H3K4 levels and represses transcription. SNAI 1 is expressed in a variety of tissues with the highest expression in kidney. Mutations in the SNAI1 gene may result in cercarial dermatitis and fasciolopsiasis. STJ95716 was affinity purified. This poly clonal antibody binds SNAI 1.

Model	STJ95716
Host	Rabbit
Reactivity	Human, Mouse, Simian
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human SNAI 1 around the non-phosphorylation site of S246.
Immunogen Region	190-270 aa
Gene ID	6615
Gene Symbol	SNAI1
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:5000

Specificity	SNAI 1 Polyclonal Antibody detects endogenous levels of SNAI 1 protein.
Tissue Specificity	Expressed in a variety of tissues with the highest expression in kidney. Expressed in mesenchymal and epithelial cell lines.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Zinc finger protein SNAI1 Protein snail homolog 1 Protein sna
Molecular Weight	29 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:11128 OMIM:604238
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. 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. 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.
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. Ubiquitinated on Lys-98, Lys-137 and Lys-146 by FBXL14 and BTRC leading to degradation. BTRC-triggered ubiquitination requires previous GSK3B-mediated SNAI1 phosphorylation. Ubiquitination induced upon interaction with NOTCH1 or TP53/p53 is mediated by MDM2.; O-GlcNAcylation at Ser-112 is enhanced in hyperglycaemic conditions, it

opposes phosphorylation by GSK3B, and stabilizes the protein.; ADP-ribosylation by PARP1 increases protein half-life and may be involved in TGFB-induced SNAI1 up-regulation.

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