

### ARG56427 anti-SNAIL antibody

Package: 50 μl Store at: -20°C

## Summary

Product Description	Rabbit Polyclonal antibody recognizes SNAIL
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-P, WB
Specificity	This antibody detects endogenous levels of SNAIL protein.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	SNAIL
Species	Human
Immunogen	Synthetic peptide around Ser246 of Human SNAIL.
Conjugation	Un-conjugated
Alternate Names	SNAH; SNAIL; SNA; dJ710H13.1; Protein sna; Protein snail homolog 1; Zinc finger protein SNAI1; SLUGH2; SNAIL1

## **Application Instructions**

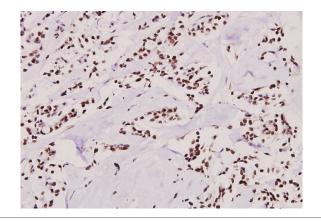
Application table	Application	Dilution
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recomm should be determined by the sc	nended starting dilutions and the optimal dilutions or concentrations ientist.

# Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Purity	> 95% (by SDS-PAGE).
Buffer	PBS (pH 7.2) and 0.05% Sodium azide.
Preservative	0.05% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

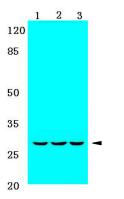
# Bioinformation

Database links	GeneID: 20613 Mouse
	GenelD: 6615 Human
	Swiss-port # 095863 Human
	Swiss-port # Q02085 Mouse
Gene Symbol	SNAI1
Gene Full Name	snail family zinc finger 1
Background	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. [provided by RefSeq, Jul 2008]
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. [UniProt]
Calculated Mw	29 kDa
ΡΤΜ	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.



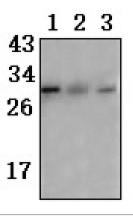
### ARG56427 anti-SNAIL antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast carcinoma tissue stained with ARG56427 anti-SNAIL antibody at 1:100 dilution.



#### ARG56427 anti-SNAIL antibody WB image

Western blot: 1) MCF-7, 2) NIH-3T3, and 3) Rat heart lysates stained with ARG56427 anti-SNAIL antibody at 1:500 dilution.



#### ARG56427 anti-SNAIL antibody WB image

Western blot: 40  $\mu g$  of 1) HCT116 whole cell lysate, 2) Mouse kidney, and 3) Rat kidney lysates stained with ARG56427 anti-SNAIL antibody at 1:500 dilution.