

# **Product datasheet**

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# ARG66974 anti-SNAIL antibody

Package: 100 μl Store at: -20°C

# **Summary**

Product Description Rabbit Polyclonal antibody recognizes SNAIL

Tested Reactivity Hu
Predict Reactivity Ms

Tested Application ICC/IF, IHC-P, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG
Target Name SNAIL

Species Human

Immunogen Synthetic peptide corresponding to 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
	ICC/IF	1:200 - 1:400
	IHC-P	1:100 - 1:300
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~29 kDa	

# **Properties**

Form	Liquid	
Purification	Affinity purified.	
Buffer	100 mM Tris Glycine (pH 7.0), 0.025% ProClin 300 and 20% Glycerol.	
Preservative	0.025% ProClin 300	
Stabilizer	20% Glycerol	
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

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

PTM Phosphorylated by GSK3B. Once phosphorylated, it becomes a target for BTRC ubiquitination.

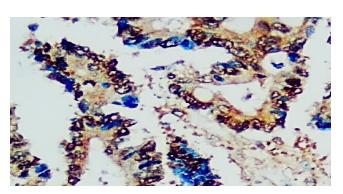
Phosphorylation by CSNK1E, probably at Ser-104, provides the priming site for the subsequent phosphorylation by GSK3B, probably at Ser-100 and Ser-96. Phosphorylation by PAK1 may modulate its transcriptional activity by promoting increased accumulation in the nucleus. Phosphorylation at Ser-11 and Ser-92 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.

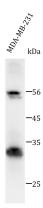
ADP-ribosylation by PARP1 increases protein half-life and may be involved in TGFB-induced SNAI1 upregulation.

# **Images**



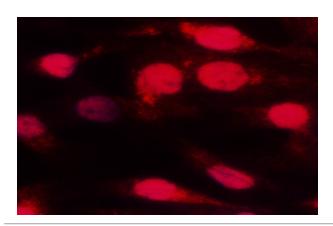
#### ARG66974 anti-SNAIL antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded human cancer tissue section. The section was stained with ARG66974 anti-SNAIL antibody at 1:300 dilution.



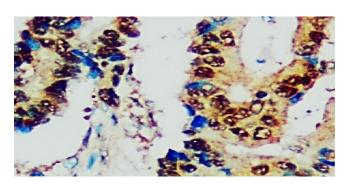
# ARG66974 anti-SNAIL antibody WB image

Western blot: Mouse MDA-MB-231 stained with ARG66974 anti-SNAIL antibody WB at 1:1000 dilution.



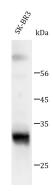
#### ARG66974 anti-SNAIL antibody ICC/IF image

Immunofluorescence: Formalin-fixed MDAB-231 cells were permeabilized with 0.1% NP-40 in TBS for 10 minutes and blocked with 5% BSA-PBS for 30 minutes at room temperature. MDAB-231 cell were stained with ARG66974 anti-SNAIL antibody with 1:200 dilution.



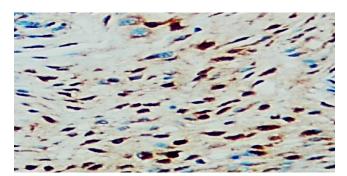
# ARG66974 anti-SNAIL antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded human cancer tissue section. The section was stained with ARG66974 anti-SNAIL antibody at 1:300 dilution.



# ARG66974 anti-SNAIL antibody WB image

Western blot: Mouse uterus tissue stained with ARG66974 anti-SK-BR3 antibody WB at 1:1000 dilution.



# ARG66974 anti-SNAIL antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded human cancer tissue section. The section was stained with ARG66974 anti-SNAIL antibody at 1:300 dilution.