

**SNAI 1 Polyclonal Antibody**  
Catalog # AP72534**Specification****SNAI 1 Polyclonal Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB                     |
| Primary Accession | <a href="#">O95863</a> |
| Reactivity        | Human, Mouse, Monkey   |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |

**SNAI 1 Polyclonal Antibody - Additional Information****Gene ID** 6615**Other Names**

SNAI1; SNAH; Zinc finger protein SNAI1; Protein snail homolog 1; Protein sna

**Dilution**

WB~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**SNAI 1 Polyclonal Antibody - 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](http://www.uniprot.org/citations/10655587), PubMed: [15647282](http://www.uniprot.org/citations/15647282), PubMed: [20389281](http://www.uniprot.org/citations/20389281), PubMed: [20562920](http://www.uniprot.org/citations/20562920), PubMed: [21952048](http://www.uniprot.org/citations/21952048), PubMed: [25827072](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/10655587), PubMed: [20389281](http://www.uniprot.org/citations/20389281), PubMed: [20389281](http://www.uniprot.org/citations/20389281), PubMed: [20389281](http://www.uniprot.org/citations/20389281)).

<http://www.uniprot.org/citations/20562920> target="\_blank">20562920</a>). 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:<a href="http://www.uniprot.org/citations/20389281" target="\_blank">20389281</a>, PubMed:<a href="http://www.uniprot.org/citations/21300290" target="\_blank">21300290</a>, PubMed:<a href="http://www.uniprot.org/citations/23721412" target="\_blank">23721412</a>). During EMT, involved with LOXL2 in negatively regulating pericentromeric heterochromatin transcription (PubMed:<a href="http://www.uniprot.org/citations/16096638" target="\_blank">16096638</a>). 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:<a href="http://www.uniprot.org/citations/20121949" target="\_blank">20121949</a>). In addition, may also activate the CDKN2B promoter by itself (PubMed:<a href="http://www.uniprot.org/citations/20121949" target="\_blank">20121949</a>).

### 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

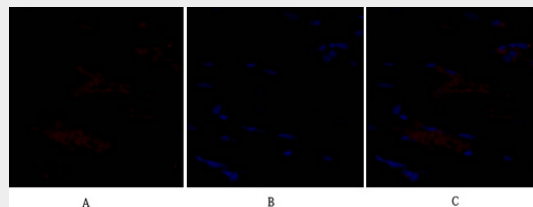
Expressed in a variety of tissues with the highest expression in kidney. Expressed in mesenchymal and epithelial cell lines.

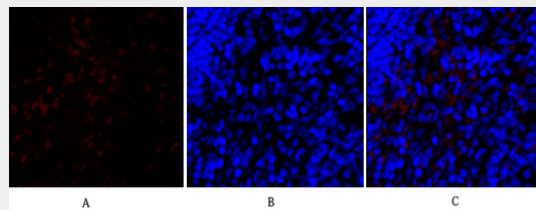
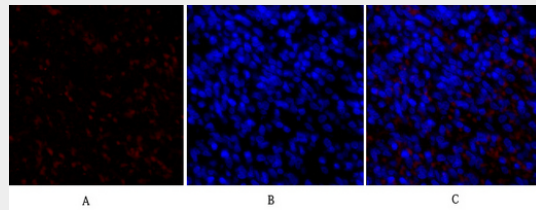
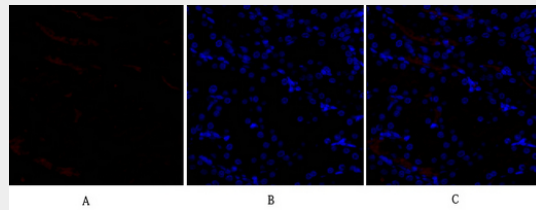
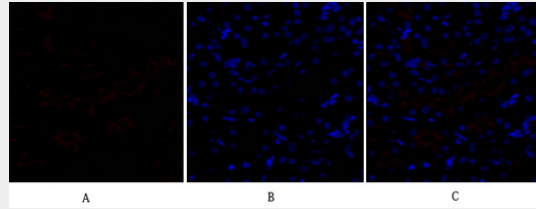
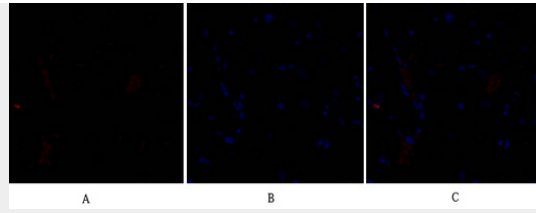
## SNAI 1 Polyclonal Antibody - Protocols

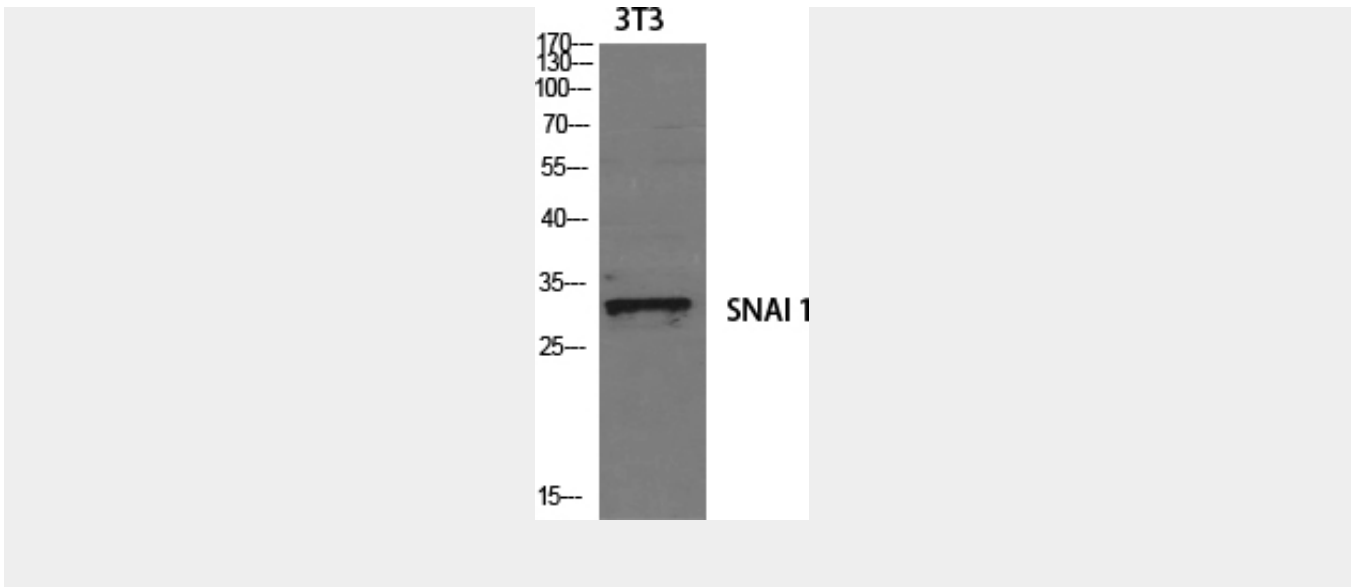
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## SNAI 1 Polyclonal Antibody - Images







### SNAI 1 Polyclonal Antibody - Background

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 (By similarity). 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. In addition, may also activate the CDKN2B promoter by itself.