

DESCRIPTION	
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Snail in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Snail Pro2-Arg264 Accession # O95863
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

**APPLICATIONS**  
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.5 µg/mL	See Below
<b>Chromatin Immunoprecipitation (ChIP)</b>	5 µg/5 x 10 <sup>6</sup> cells	See Below
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<b>Intracellular Staining by Flow Cytometry</b>	0.25 µg/10 <sup>6</sup> cells	See Below

**DATA**

**Western Blot**

**Detection of Human Snail by Western Blot.** Western blot shows lysates of A549 human lung carcinoma cell line and JEG-3 human epithelial choriocarcinoma cell line. PVDF membrane was probed with 0.5 µg/mL of Goat Anti-Human Snail Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3639) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for Snail at approximately 29 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**Chromatin Immunoprecipitation (ChIP)**

**Detection of Snail-regulated Genes by Chromatin Immunoprecipitation.** Jurkat human acute T cell leukemia cell line treated with 50 ng/mL PMA and 200 ng/mL calcium ionomycin for 30 minutes was fixed using formaldehyde, resuspended in lysis buffer, and sonicated to shear chromatin. Snail/DNA complexes were immunoprecipitated using 5 µg Goat Anti-Human Snail Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3639) or control antibody (Catalog # AB-108-C) for 15 minutes in an ultrasonic bath, followed by Biotinylated Anti-Goat IgG Secondary Antibody (Catalog # BAF109). Immunocomplexes were captured using 50 µL of MagCellec Streptavidin Ferrofluid (Catalog # MAG999) and DNA was purified using chelating resin solution. The *E-Cadherin* promoter was detected by standard PCR.

**Immunocytochemistry**

**Snail in A549 Human Cell Line.** Snail was detected in immersion fixed A549 human lung carcinoma cell line treated with Recombinant Human TGF-β1 (left panel, Catalog # 240-B) or untreated (right panel) using Goat Anti-Human Snail Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3639) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to nuclei. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

**Intracellular Staining by Flow Cytometry**

**Detection of Snail in A549 Human Cell Line by Flow Cytometry.** A549 human lung carcinoma cell line was stained with Goat Anti-Human Snail Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3639, filled histogram) or isotype control antibody (Catalog # AB-108-C, open histogram), followed by Fluorescein-conjugated Anti-Goat IgG Secondary Antibody (Catalog # F0109). To facilitate intracellular staining, cells were fixed and permeabilized with FlowX FoxP3 Fixation & Permeabilization Buffer Kit (Catalog # FC012). View our protocol for Staining Intracellular Molecules.

#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>

#### BACKGROUND

Snail is predicted 29 kDa nuclear zinc finger transcriptional repressor that contains an N-terminal basic SNAG domain followed by three classical and one atypical zinc finger domains. During development, Snail is required for the establishment of left-right axis asymmetry. It also regulates the transcription of E-cadherin and other genes involved in epithelial-mesenchymal transitions during cancer progression. Human Snail shares 88% amino acid sequence identity with mouse and rat Snail.