**Product datasheet**

**Anti-SNAIL + SLUG antibody ab180714**

⭐⭐⭐⭐ 6 Abreviews  51 References  12 Images

**Overview**

**Product name**  Anti-SNAIL + SLUG antibody  
**Description**  Rabbit polyclonal to SNAIL + SLUG  
**Host species**  Rabbit  
**Tested applications**  Suitable for: IHC-Fr, WB, ICC/IF, IHC-P

**Species reactivity**  Reacts with: Mouse, Rat, Human

**Immunogen**  Synthetic peptide within Human SNAIL+SLUG aa 236-264. The exact sequence is proprietary.  
Database link: [O95863](#)

**Positive control**  WB: HeLa, A431, MCF7, K563, SW620 and HepG2 cell lysates; mouse lung, mouse heart and rat liver tissue lysates. IHC-P: Human kidney, human colon carcinoma, mouse testis and rat brain tissues.

**Properties**

**Form**  Liquid

**Storage instructions**  Shipped at 4°C. Store at 4°C (stable for up to 12 months). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.

**Storage buffer**  pH: 7.3  
Preservative: 0.02% Sodium azide  
Constituents: 50% Glycerol, 49% PBS

**Purity**  Immunogen affinity purified

**Clonality**  Polyclonal  
**Isotype**  IgG

**Applications**

Our **Abpromise guarantee** covers the use of **ab180714** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHC-Fr</td>
<td>⭐⭐⭐⭐</td>
<td>1/100.</td>
</tr>
</tbody>
</table>
### Target

#### Relevance

Function: SNAIL is involved in the epithelial to mesenchymal transition (EMT) and formation and maintenance of embryonic mesoderm (By similarity). Binds to 3 E-boxes of the E-cadherin gene promoter and represses its transcription. SLUG is a transcriptional repressor, involved in the generation and migration of neural crest cells. PTM: SNAIL is phosphorylated by GSK3B. Once phosphorylated, it becomes a target for BTRC ubiquitination. 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. Similarity: Both SNAIL and SLUG belong to the snail C2H2-type zinc-finger protein family. Tissue specificity: SNAIL is expressed in a variety of tissues with the highest expression in kidney. Expressed in mesenchymal and epithelial cell lines. SLUG is expressed in placenta and adult heart, pancreas, liver, kidney and skeletal muscle.

#### Cellular localization

Slug is generally nuclear, while Snail is known to be both cytoplasmic and nuclear. Once phosphorylated (probably on Ser-107, Ser-111, Ser-115 and Ser-119) snail is exported from the nucleus to the cytoplasm where subsequent phosphorylation of the destruction motif and ubiquitination involving BTRC occurs.

### Images

Anti-SNAIL + SLUG antibody (ab180714) at 1/500 dilution + Mouse heart tissue extracts

**Predicted band size**: 29 kDa

### Table

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICC/IF</td>
<td>★★★★☆</td>
<td>1/50 - 1/200.</td>
</tr>
<tr>
<td>IHC-P</td>
<td>★★★★☆</td>
<td>1/50 - 1/200.</td>
</tr>
</tbody>
</table>
Western blot - Anti-SNAIL + SLUG antibody (ab180714)

All lanes: Anti-SNAIL + SLUG antibody (ab180714)

Lane 1: HeLa cell lysate
Lane 2: A431 cell lysate
Lane 3: HepG2 cell lysate
Lane 4: Mouse lung tissue lysate
Lane 5: Rat liver tissue lysate

Predicted band size: 29 kDa

Immunohistochemical analysis of paraffin-embedded mouse testis tissue labeling SNAI1+SLUG with ab180714 at 1/50 dilution.
ab180714 staining SNAIL in human MCF10A cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 3.7% PFA in PBS for 15 minutes and blocked with 0.1% Milk + 0.1% Tween in PBS for 30 minutes at 25°C. Samples were incubated with primary antibody (1/1000 in PBS + 0.1% Tween) for 16 hours at 4°C. An Alexa Fluor® 488-conjugated donkey anti-rabbit IgG polyclonal (1/500) was used as the secondary antibody.

Immunohistochemical analysis of paraffin-embedded rat brain tissue labeling SNAIL + SLUG with ab180714 at 1/100 dilution.

Western blot analysis of extracts of various cell lines using ab180714 at the dilution 1/500.
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SNAIL + SLUG antibody (ab180714)

Image is courtesy of an anonymous Abreview

ab180714 staining SNAIL in Mouse kidney tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde; antigen retrieval was by heat mediation in a basic buffer (TRIS+EDTA, pH9). Samples were incubated with primary antibody (1/500 in antibody diluent) for 1 hour. An undiluted HRP-conjugated Goat anti-rabbit IgG polyclonal was used as the secondary antibody.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue labelling SNAIL with ab180714. Tissue was fixed with formaldehyde and blocked with 5% BSA for 20 min at room temperature; antigen retrieval was by heat mediation with EDTA buffer (pH 9.0). Samples were incubated with primary antibody (1/100) for 12 hours at 4°C. A Biotin-conjugated mouse anti-rabbit IgG polyclonal (1/200) was used as the secondary antibody. Magnification: 200X.
Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue labeling SNAIL + SLUG with ab180714 at 1/100 dilution.

Lane 1: Snail recombinant 0.1 ug (55 kDa)
Lane 2: Slug recombinant 0.1 ug (56 kDa)

Immunohistochemical analysis of human kidney tissue labeling SNAIL with ab180714. Tissue was fixed with formaldehyde and blocked with 5% BSA for 20 min at room temperature; antigen retrieval was by heat mediation with EDTA buffer (pH 9.0). Samples were incubated with primary antibody (1/100) for 12 hours at 4°C. A Biotin-conjugated mouse anti-rabbit IgG polyclonal (1/200) was used as the secondary antibody. Magnification: 400X.
ab180714 staining SNAIL in mouse embryonic heart tissue sections by Immunohistochemistry (IHC-Fr - frozen sections). Tissue was fixed with paraformaldehyde and blocked with 1% BSA for 30 minutes at room temperature. Samples were incubated with primary antibody (1/100 in blocking buffer) for 16 hours at 4°C. An undiluted Alexa Fluor® 488-conjugated donkey anti-rabbit IgG polyclonal was used as the secondary antibody.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors