### Anti-Hes1 antibody ab71559

**Product name**: Anti-Hes1 antibody  
**Description**: Rabbit polyclonal to Hes1  
**Host species**: Rabbit  
**Specificity**: This antibody reacts specifically with mouse 30 kDa Hes1 protein.  
**Tested applications**: Suitable for: IHC-Fr, ICC/IF, IHC-P, WB  
**Species reactivity**: Reacts with: Mouse, Human  
**Predicted to work with**: Rat  
**Immunogen**: Synthetic peptide corresponding to Human Hes1 (C terminal). Database link: Q14469  
(Peptide available as ab126460)

### Properties

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
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<tbody>
<tr>
<td>Storage buffer</td>
<td>Constituents: 1.21% Tris, 0.75% Glycine, 2% Sucrose</td>
</tr>
<tr>
<td>Purity</td>
<td>Whole antiserum</td>
</tr>
<tr>
<td>Clonality</td>
<td>Polyclonal</td>
</tr>
<tr>
<td>Isotype</td>
<td>IgG</td>
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### Applications

Our Abpromise guarantee covers the use of ab71559 in the following tested applications.  
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tr>
<td>IHC-Fr</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
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</table>
## Target

### Function
Transcriptional repressor of genes that require a bHLH protein for their transcription. May act as a negative regulator of myogenesis by inhibiting the functions of MYOD1 and ASH1. Binds DNA on N-box motifs: 5'-CACNAG-3' with high affinity and on E-box motifs: 5'-CANNTG-3' with low affinity.

### Sequence similarities
Contains 1 basic helix-loop-helix (bHLH) domain.
Contains 1 Orange domain.

### Domain
Has a particular type of basic domain (presence of a helix-interrupting proline) that binds to the N-box (CACNAG), rather than the canonical E-box (CANNTG).
The C-terminal WRPW motif is a transcriptional repression domain necessary for the interaction with Groucho/TLE family members, transcriptional corepressors recruited to specific target DNA by Hairy-related proteins.
The bHLH, as well as cooperation between the central Orange domain and the C-terminal WRPW motif, is required for transcriptional repressor activity.

### Cellular localization
Nucleus.

## Images

<table>
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<tr>
<th>Application</th>
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</thead>
<tbody>
<tr>
<td>ICC/IF</td>
<td>5/5/5/5</td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>IHC-P</td>
<td>5/5/5/5</td>
<td>Use at an assay dependent concentration.</td>
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</table>

### Anti-Hes1 antibody (ab71559) at 1/2000 dilution + MCF-7 at 20 µg

**Secondary**
HRP conjugated goat anti-rabbit at 1/20000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 30 kDa

**Exposure time:** 15 seconds

Blocked with 5% milk at RT
Immunohistochemistry (Frozen sections) - Anti-Hes1 antibody (ab71559)

This image is courtesy of an anonymous Abreview

ab71559 staining Hes1 in Mouse skin tissue sections by Immunohistochemistry (IHC-Fr - frozen sections). Tissue was fixed with acetone/methanol (1:1), permeabilized with PBS + triton X100 (0.025%) and blocked with 10% serum for 1 hour at room temperature. Samples were incubated with primary antibody (1/100 in PBS) for 8 hours at 4°C. An Alexa Fluor®555-conjugated goat anti-rabbit IgG polyclonal (1/1000) was used as the secondary antibody.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hes1 antibody (ab71559)

This image is courtesy of an anonymous Abreview

ab71559 staining Hes1 in human pancreatic cancer tissue by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded tissue sections). The sections were fixed in paraformaldehyde and subjected to heat-mediated antigen retrieval in citric buffer prior to permeabilising in PBS + Triton X-100 0.025% and blocking with 10% serum for 1 hour at RT. The primary antibody was diluted 1/250 and incubated with the sample for 8 hours at 4°C. An biotin-conjugated Goat anti-Rabbit polyclonal was used as the secondary antibody, diluted 1/1000.

Immunocytochemistry/Immunofluorescence - Anti-Hes1 antibody (ab71559)

This image is courtesy of an anonymous Abreview

ab71559 staining Hes1 in the mouse NIH3T3 cell line from by ICC/IF (Immunocytochemistry/Immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with Triton X-100 0.1% in PBS and blocked with 10% serum for 30 minutes. Samples were incubated with primary antibody (1/200) for 16 hour at 4°C. An Alexa Fluor®488-conjugated Goat anti-rabbit polyclonal was used as the secondary antibody.
**All lanes**: Anti-Hes1 antibody (ab71559)

**Lane 1**: Normal kidney tissue taken from a patient of sporadic angiomyolipoma. (Patient 1)

**Lane 2**: Tumor tissue taken from a patient of sporadic angiomyolipoma. (Patient 1)

**Lane 3**: Normal kidney tissue taken from a patient of sporadic angiomyolipoma. (Patient 2)

**Lane 4**: Tumor tissue taken from a patient of sporadic angiomyolipoma. (Patient 2)

**Lane 5**: Normal kidney tissue taken from a patient of sporadic angiomyolipoma. (Patient 3)

**Lane 6**: Tumor tissue taken from a patient of sporadic angiomyolipoma. (Patient 3)

**Lane 7**: Normal kidney tissue taken from a patient of sporadic angiomyolipoma. (Patient 4)

**Lane 8**: Tumor tissue taken from a patient of sporadic angiomyolipoma. (Patient 4)

**Predicted band size**: 30 kDa

Actin blot given as control.

*ab71559* staining Hes1 in small intestine tissue by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded tissue sections). The sections were fixed in paraformaldehyde and subjected to heat-mediated antigen retrieval in citric buffer, pH 6.0 prior to blocking with 10% serum for 1 hour at 20°C. The primary antibody was diluted 1/100 and incubated with the sample for 12 hours at 4°C. An HRP-conjugated Goat anti-Rabbit polyclonal was used as the secondary antibody, diluted 1/200.

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