abcam

Product datasheet

# Neural Stem Cell Marker (Nestin, SOX2, Occludin, E Cadherin, Hes1, Notch1) Antibody Panel - Human ab254027

リコンビナント

画像数 15

## 製品の概要

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|---|---|
| **製品名** | Neural Stem Cell Marker (Nestin, SOX2, Occludin, E Cadherin, Hes1, Notch1) Antibody Panel - Human |
| **種交差性** | **交差種:** Human |
| **製品の概要** | Neural Stem Cell (Neuroepithelial) Marker Antibody Panel - Human ab254027 contains multiple trial-sized versions of anti-human antibody clones against Nestin, SOX2, Occludin, E Cadherin, Hes1, Notch1 specifically selected for high performance in various applications. This panel contains 6 recombinant rabbit monoclonal antibodies against human Nestin, SOX2, Occludin, E Cadherin, Hes1, Notch1. They are provided as a sampler panel to allow you to easily evaluate each in your required applications.<br><br>For guidelines on how to use each antibody within the panel, please consult the individual datasheet for each antibody.<br><br>Panel contains:<br><br>- Rabbit monoclonal [SP103] to Nestin (20 µL) **ab105389**<br><br>- Rabbit monoclonal [EPR3131] to SOX2 (20 µL) **ab92494**<br><br>- Rabbit monoclonal [EPR20992] to Occludin (20 µL) **ab216327**<br><br>- Rabbit monoclonal [EP700Y] to E Cadherin - Intercellular Junction Marker (20 µL) **ab40772**<br><br>- Rabbit monoclonal [EPR4226] to Hes1 (20 µL) **ab108937**<br><br>- Rabbit monoclonal [EP1238Y] to Notch1 (20 µL) **ab52627** |
| **特記事項** | **Explore our range of antibody sample panels** designed to provide you with a variety of trial-size antibodies in a convenient and cost-effective format.<br><br>Directly conjugated versions of our antibodies are available and ready to use for multicolor flow |

cytometry or immunocytochemistry analysis. **Carrier-free formulations** are also available for easy conjugation to labels of your choice. Please refer to the 'Associated products' section below.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

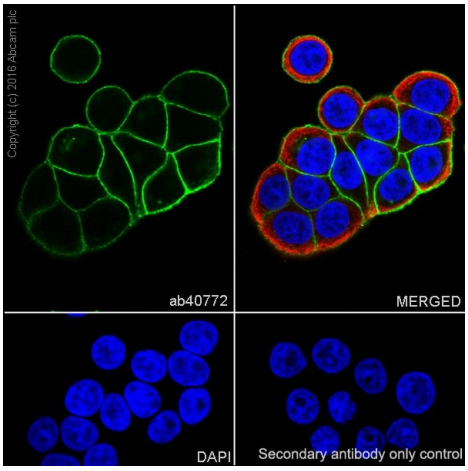
## 製品の特性

**保存方法** Store at -20°C. Please refer to protocols.

| 内容 | 1 kit |
|---|---|
| **ab40772 - Anti-E Cadherin antibody [EP700Y]** | 2 x 10µl |
| **ab108937 - Anti-Hes1 antibody [EPR4226]** | 2 x 10µl |
| **ab105389 - Anti-Nestin antibody [SP103]** | 2 x 10µl |
| **ab52627 - Anti-Notch1 antibody [EP1238Y]** | 2 x 10µl |
| **ab216327 - Anti-Occludin antibody [EPR20992]** | 2 x 10µl |
| **ab92494 - Anti-SOX2 antibody [EPR3131]** | 2 x 10µl |

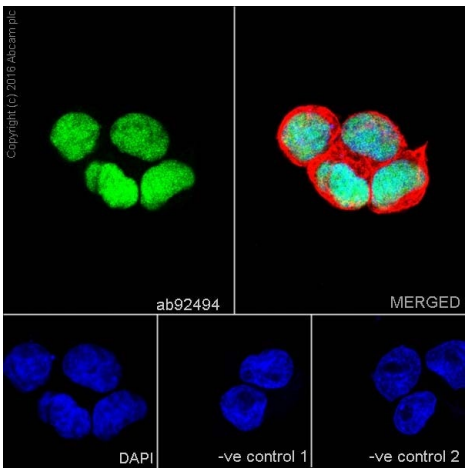
**細胞内局在** E Cadherin: Cell junction. Cell membrane. Endosome. Golgi apparatus > trans-Golgi network. Colocalizes with DLGAP5 at sites of cell-cell contact in intestinal epithelial cells. Anchored to actin microfilaments through association with alpha-, beta- and gamma-catenin. Sequential proteolysis induced by apoptosis or calcium influx, results in translocation from sites of cell-cell contact to the cytoplasm. Colocalizes with RAB11A endosomes during its transport from the Golgi apparatus to the plasma membrane. SOX2: Nucleus. Notch1: Cell membrane and Nucleus. Following proteolytical processing NICD is translocated to the nucleus. Hes1: Nucleus. Occludin: Membrane. Cell junction > tight junction.

## 画像




Immunocytochemistry/ Immunofluorescence - Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker

**ab40772** staining E Cadherin in HT-29 (Human colorectal adenocarcinoma) cells by ICC/IF (Immunocytochemistry/Immunofluorescence). Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% tritonX-100. Samples were incubated with primary antibody at 1/500 dilution. An Alexa Fluor® 488 Goat anti-Rabbit (**ab150077**) was used as the secondary antibody at 1/1000 dilution. Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) at 1/200 dilution was used as a counterstain. DAPI was used as a nuclear counterstain. This is a confocal image showing membranous staining on HT-29 cell line.



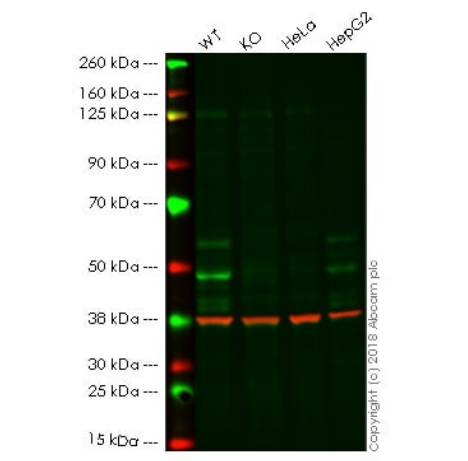

Immunocytochemistry/ Immunofluorescence - Anti-SOX2 antibody [EPR3131]

Confocal image showing nuclear staining on NCCIT cells

Ab92494 staining SOX2 in NCCIT cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 4% PFA, permeabilized with 0.1% Triton-X. Samples were incubated with primary antibody (1/200). An Alexa Fluor® 488-conjugated Goat anti-Rabbit IgG, Ab150077 (1/1000) was used as the secondary antibody. Counterstained with Ab7291 anti-Tubulin (1/1000), Ab150120 AlexaFluor®594 Goat anti-Mouse secondary (1/1000). DAPI was used as a nuclear counter stain.

Negative control 1 Ab92494 was used as the primary antibody at 1/200 and Ab150120 was used as the secondary at 1/1000.

Negative control 2 Ab7291was used as the primary antibody at 1/1000 and Ab150077 was used as the secondary at 1/1000.




Western blot - Anti-Occludin antibody [EPR20992]

**All lanes :** Anti-Occludin antibody [EPR20992] (**ab216327**) at 1/1000 dilution

**Lane 1 :** Wild-type HAP1 whole cell lysate at 40 µg

**Lane 2 :** OCLN (Occludin) knockout HAP1 whole cell lysate at 40 µg

**Lane 3 :** HeLa whole cell lysate (Low Occludin expression) at 20 µg

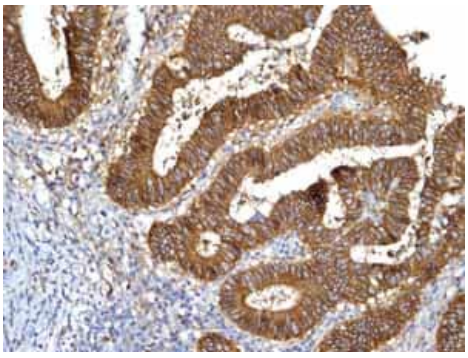
**Lane 4 :** HepG2 whole cell lysate lysate (High Occludin expression) at 20 µg

**Predicted band size: 59 kDa**

**Lanes 1 - 4:** Merged signal (red and green). Green - **ab216327** observed at 59 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

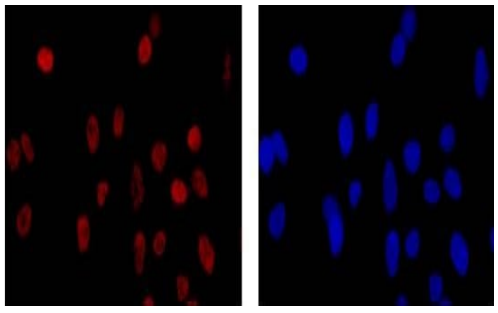
**ab216327** was shown to recognize Occludin in wild-type HAP1 cells as signal was lost at the expected MW in OCLN (Occludin) knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and OCLN (Occludin) knockout samples were subjected to SDS-PAGE. Ab216327 and **ab9484** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

Occludin expression in HeLa is expected to be negative.



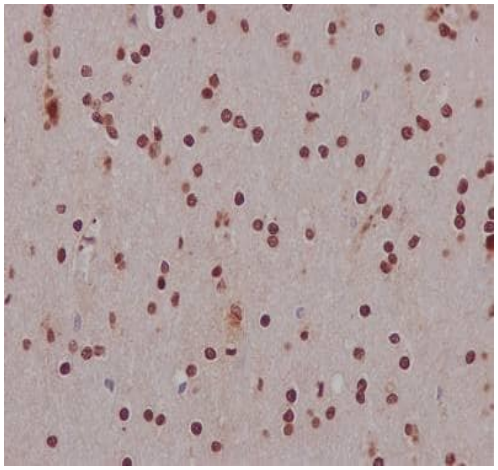
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker

Formalin/PFA-fixed paraffin-embedded human colonic adenocarcinoma tissue stained for E Cadherin with unpurified **ab40772** at a 1/500 dilution in immunohistochemical analysis.



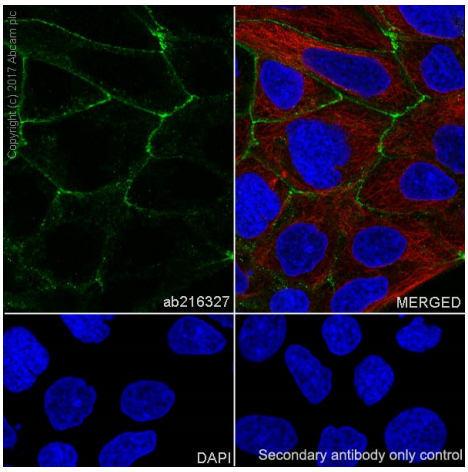
Immunocytochemistry/ Immunofluorescence - Anti-Hes1 antibody [EPR4226]

Immunofluorescent staining of SH-SY5Y cells (fixed with 4% PFA and permeablized with TritonX 100) with purified **ab108937** at a dilution of 1/100. An Alexa Fluor® 555 goat anti-rabbit antibody was used as the secondary at a dilution of 1/200. The panel on the right shows the DAPI counter-staining.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hes1 antibody [EPR4226]

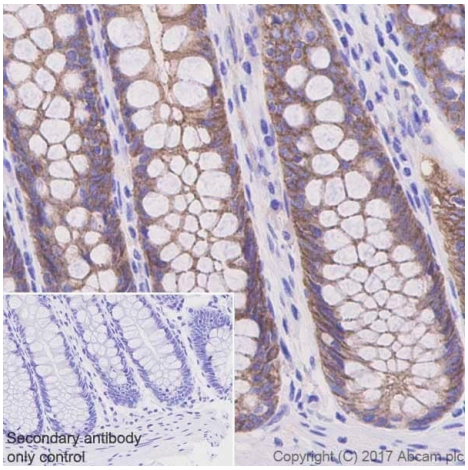
Primary ab concentration dilution: 1:200, (0.5ug/ml), Secondary ab: ImmunoHistoprobe (Ready to use) HRP Polymer for Rabbit IgG, Secondary ab concentration: Prediluted, Tissue: Human brain, Fixative: Paraffin-embedded sections, Counter stain: Hematoxylin Antigen retrieval: Perform heat mediated antigen retrieval using Tris/EDTA Buffer, PH9




Immunocytochemistry/ Immunofluorescence - Anti-Occludin antibody [EPR20992]

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Caco-2 (human colorectal adenocarcinoma cell line) cells labeling Occludin with **ab216327** at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing membrane staining on Caco-2 cell line.

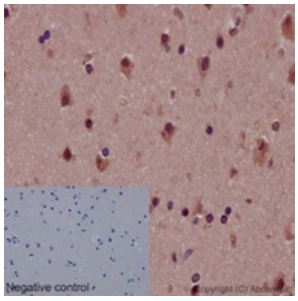
The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) at 1/200 dilution (red).




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Occludin antibody [EPR20992]

Immunohistochemical analysis of paraffin-embedded human colon tissue labeling Occludin with **ab216327** at 1/200 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Membranous staining on human colon is observed (PMID: 24268521). Counter stained with Hematoxylin.

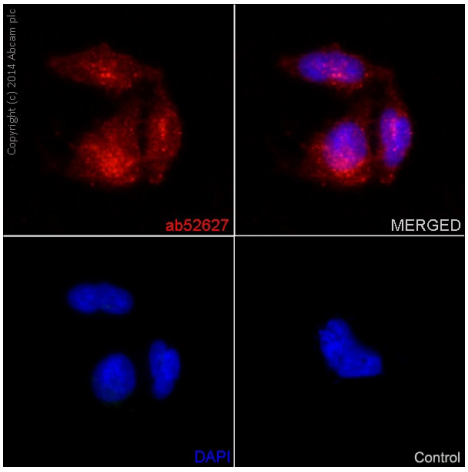
Secondary antibody only control: **ab209101** (Rabbit specific IHC polymer detection kit HRP/DAB).




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Notch1 antibody [EP1238Y]

Immunohistochemical staining of paraffin-embedded human brain with purified **ab52627** at a dilution of 1/150.

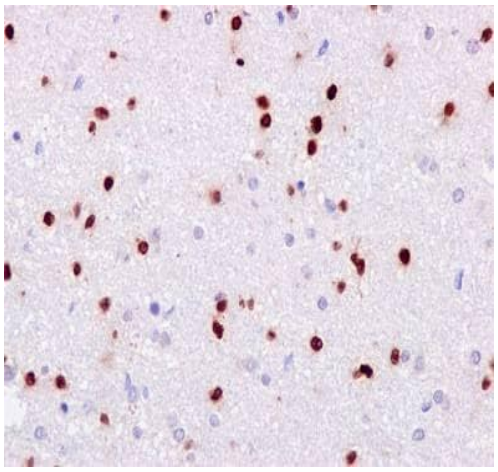
A prediluted HRP polymer for rabbit IgG was used as the secondary and the sample was stained with hematoxylin. PBS was used instead of the primary antibody as the **negative control**, and is shown in the inset.




Immunocytochemistry/ Immunofluorescence - Anti-Notch1 antibody [EP1238Y]

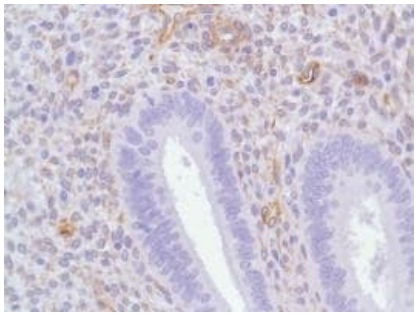
Immunofluorescent staining of HeLa (Human epithelial cell line from cervix adenocarcinoma) cells fixed with 4% PFA using purified **ab52627** at a dilution of 1/150.

An Alexa Fluor® 555 goat anti-rabbit was used as the secondary and the sample was stained with DAPI. An Alexa Fluor® 555 goat anti-mouse was used at a dilution of 1/500 after **ab52627** as the **negative control** and is shown in the bottom right hand panel.



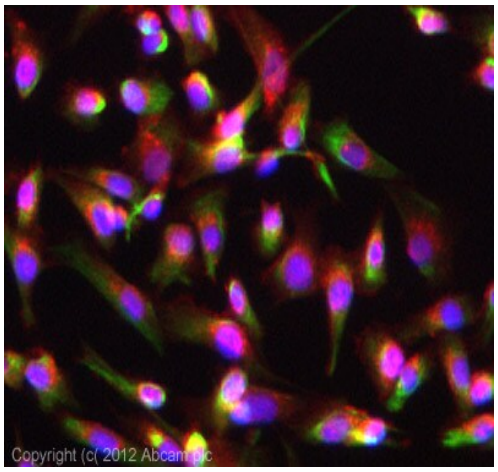
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX2 antibody [EPR3131]

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human gliocytoma tissue labelling SOX2 with unpurified **ab92494** at 1/60. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. A prediluted HRP-polymer conjugated anti-rabbit IgG was used as the secondary antibody. Counterstained with Hematoxylin.



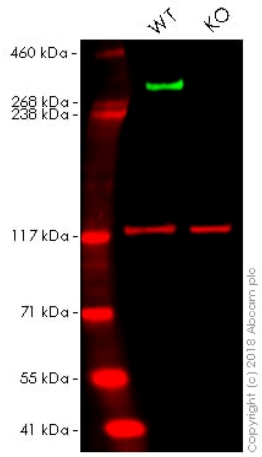
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nestin antibody [SP103]

Formalin-fixed, paraffin-embedded human endometrium tissue stained for Nestin using **ab105389** at 1/100 dilution in immunohistochemical analysis.




Immunocytochemistry/ Immunofluorescence - Anti-Nestin antibody [SP103]

ICC/IF image of **ab105389** stained SKNSH cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (**ab105389**, 1/200 dilution) overnight at +4°C. The secondary antibody (green) was **ab96899**, DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.




Western blot - Anti-Nestin antibody [SP103]

**All lanes :** Anti-Nestin antibody [SP103] (**ab105389**) at 1/100 dilution

**Lane 1 :** Wild-type HAP1 whole cell lysate

**Lane 2 :** NES knockout HAP1 whole cell lysate

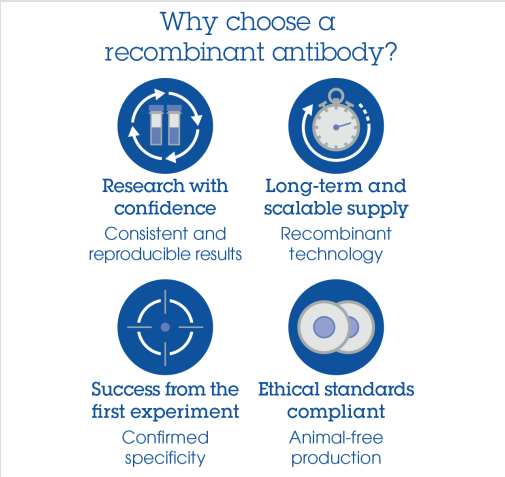
Lysates/proteins at 20 µg per lane.

**Predicted band size: 177 kDa**

**Lanes 1 - 2:** Merged signal (red and green). Green - **ab105389** observed at 300 kDa. Red - loading control, **ab18058**, observed at 117 kDa.

**ab105389** was shown to specifically react with NES in wild-type HAP1 cells as signal was lost in NES knockout cells. Wild-type and NES knockout samples were subjected to SDS-PAGE. Ab105389 and **ab18058** (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/100 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L

(IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.




Neural Stem Cell Marker (Nestin, SOX2, Occludin, E Cadherin, Hes1, Notch1) Antibody Panel - Human (ab254027)



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