# abcam

## Product datasheet

# Anti-Nestin antibody [2C1.3A11] ab18102



# ★★★★★ 1 Abreviews 22 References 7 图像

概述

产品名称 Anti-Nestin抗体[2C1.3A11]

描述 小鼠单克隆抗体[2C1.3A11] to Nestin

宿主 Mouse

经测试应用 适用于: ICC/IF, WB, Flow Cyt, IHC-P

种属反应性 与反应: Human

不与反应: Rat

免疫原 A 150 amino acid fragment from the cloned human Nestin.

常规说明

This highly specific antibody to human nestin can aid in characterizing progenitor cells differentiating into distinct lineages, in enhancing the therapeutic potential of human neural stem/progenitor cells in the treatment of CNS diseases or injury, and in identifying neuroepithelial

tumor cells.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

存储溶液 Preservative: 0.1% Sodium azide

Constituent: PBS

纯**度** Protein G purified

Primary antibody说明 This highly specific antibody to human nestin can aid in characterizing progenitor cells

1

differentiating into distinct lineages, in enhancing the therapeutic potential of human neural stem/progenitor cells in the treatment of CNS diseases or injury, and in identifying neuroepithelial ...

tumor cells.

**克隆** 单克隆

**克隆编号** 2C1.3A11

同种型 lgG1

#### 应用

# The Abpromise guarantee Abpromise™承诺保证使用ab18102于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		1/100 - 1/500.
WB		1/1000 - 1/5000. Predicted molecular weight: 177 kDa.
Flow Cyt	<b>★★★★★ (1)</b>	1/200.  ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
IHC-P		Use at an assay dependent concentration.

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功能 Required for brain and eye development. Promotes the disassembly of phosphorylated vimentin

intermediate filaments (IF) during mitosis and may play a role in the trafficking and distribution of IF proteins and other cellular factors to daughter cells during progenitor cell division. Required for

survival, renewal and mitogen-stimulated proliferation of neural progenitor cells.

组织特异性 CNS stem cells.

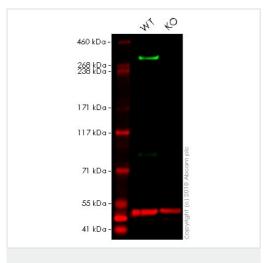
**序列相似性** Belongs to the intermediate filament family.

发展阶段 Upon terminal neural differentiation, nestin is down-regulated and replaced by neurofilaments.

翻译后修饰 Constitutively phosphorylated. This increases during mitosis when the cytoplasmic intermediate

filament network is reorganized.

#### 图片



Western blot - Anti-Nestin antibody [2C1.3A11] (ab18102)

**All lanes :** Anti-Nestin antibody [2C1.3A11] (ab18102) at 1/5000 dilution

Lane 1: Wild-type HAP1 whole cell lysate

Lane 2: NES knockout HAP1 whole cell lysate

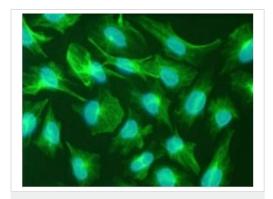
Lysates/proteins at 20 µg per lane.

Predicted band size: 177 kDa

**Lanes 1 - 2:** Merged signal (red and green). Green - ab18102 observed at 300 kDa. Red - loading control, **ab176560**, observed at 50 kDa.

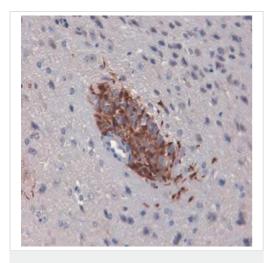
ab18102 was shown to recognize NES in wild-type HAP1 cells as signal was lost at the expected MW in NES knockout cells.

Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and NES knockout samples were subjected to SDS-PAGE. Ab18102 and <a href="mailto:ab176560">ab176560</a> (Rabbit antialpha Tubulin loading control) were incubated overnight at 4°C at 1/5000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed <a href="mailto:ab216772">ab216772</a> and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed <a href="mailto:ab216777">ab216777</a> secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



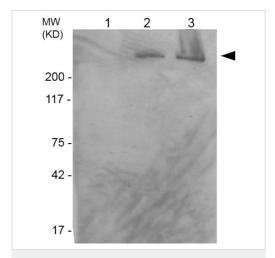
Immunocytochemistry/ Immunofluorescence - Anti-Nestin antibody [2C1.3A11] (ab18102)

Immunofluorescence staining of U251 cells (glioblastoma cell line) stained using ab18102(green) and bisbenzimide (blue)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nestin antibody
[2C1.3A11] (ab18102)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of migrating tumor cells labelling Nestin with ab18102 at  $2\mu g/ml$ . Cytoplasm and membrane positive staining shown.



Western blot - Anti-Nestin antibody [2C1.3A11] (ab18102)

**All lanes :** Anti-Nestin antibody [2C1.3A11] (ab18102) at 1/1000 dilution

Lane 1: Total rat brain protein at 5 µg

Lane 2: Human CNS progenitor cell protein at 1 µg

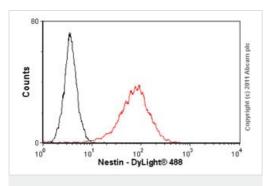
Lane 3: Human CNS progenitor cell protein at  $5 \mu g$ 

Predicted band size: 177 kDa



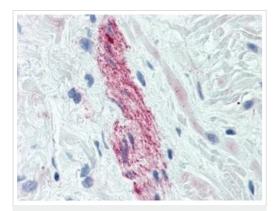
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nestin antibody
[2C1.3A11] (ab18102)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of xenograft tumor cells labelling Nestin with ab18102.



Flow Cytometry - Anti-Nestin antibody [2C1.3A11] (ab18102)

Overlay histogram showing SH-SY5Y cells stained with ab18102 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab18102, 1/200 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse lgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse lgG1 [ICIGG1] (ab91353,  $2\mu g/1x10^6$  cells) used under the same conditions. Acquisition of >5,000 events was performed.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nestin antibody
[2C1.3A11] (ab18102)

Immunohistochemistry of Anti-Nestin on formalin fixed paraffin embedded prostate nerve tissue using ab18102

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