abcam

Product datasheet

Anti-Nestin antibody [SP103] ab105389



יילטענע RabMAb

★★★★★ 9 Abreviews 59 References 画像数 18

製品の概要

製品名 Anti-Nestin antibody [SP103]

製品の詳細 Rabbit monoclonal [SP103] to Nestin

由来種 Rabbit

アプリケーション 適用あり: ICC/IF, IHC-Fr, WB, IHC-P, Flow Cyt (Intra)

種交差性 交差種: Human

交差が予測される動物種: Dog

免疫原 Synthetic peptide within Human Nestin aa 1600 to the C-terminus (C terminal). The exact

> sequence is proprietary. Database link: P48681

ポジティブ・コントロール IHC-P: Human kidney, ovary, cervix, breast, colon, endometrium, cerebellum, lung, prostate, skin

and human melanoma tissue. WB: HeLa cell lysate. Flow Cyt-Intra: SH-SY5Y cells. ICC/IF:

SKNSH cells. IHC-Fr: Frozen human kidney tissue sections

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply - Animal-free production

For more information see here.

This product is FOR RESEARCH USE ONLY. For commercial use, please contact

partnerships@abcam.com.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.

バッファー pH: 7.60

> Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA

精製度 Protein A/G purified

特記事項(精製) Purified from TCS by protein A/G.

ポリ/モノ モノクローナル

クローン名 SP103

アイソタイプ lgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab105389の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF	*** <u>*</u>	1/200.
IHC-Fr		Use a concentration of 5 µg/ml.
WB	*** <u>*</u>	1/100. Predicted molecular weight: 177 kDa.
IHC-P	★★★★★ (4)	1/100. Antigen retrieval: Boil tissue section in 10mM citrate buffer, pH 6.0 for 10 min followed by cooling at room temperature for 20 min.
Flow Cyt (Intra)		1/50. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.

ターゲット情報

機能 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.

組織特異性 CNS stem cells.

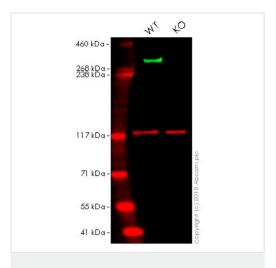
配列類似性 Belongs to the intermediate filament family.

発生段階 Upon terminal neural differentiation, nestin is down-regulated and replaced by neurofilaments.

翻訳後修飾 Constitutively phosphorylated. This increases during mitosis when the cytoplasmic intermediate

filament network is reorganized.

画像



Western blot - Anti-Nestin antibody [SP103] (ab105389)

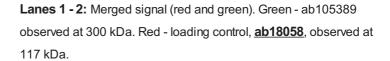
All lanes : Anti-Nestin antibody [SP103] (ab105389) at 1/100 dilution

Lane 1: Wild-type HAP1 whole cell lysate

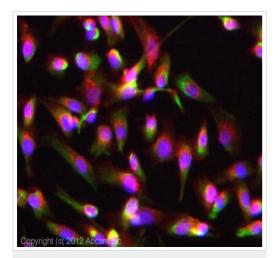
Lane 2: NES knockout HAP1 whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 177 kDa

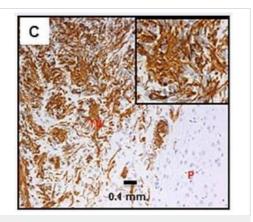


ab105389 was shown to specifically react with NES in wild-type HAP1 cells as signal was lost in NES knockout cells. Wild-type and NES knockout samples were subjected to SDS-PAGE. Ab105389 and ab18058 (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/100 dilution and 1/20000 dilution 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.



Immunocytochemistry/ Immunofluorescence - Anti-Nestin antibody [SP103] (ab105389)

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.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nestin antibody [SP103] (ab105389)

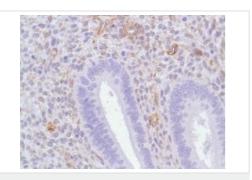
Malchenko, S. et al PLoS One. 2017 Mar 1;12(3):e0173106. doi: 10.1371/journal.pone.0173106. eCollection 2017 Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

BTIC markers in our CNS-PNET model tumors

Formalin-fixed, paraffin-embedded mouse primitive neural ectodermal tumor tissue was stained for Nestin using ab105389 at 1/30 dilution in immunohistochemical analysis.

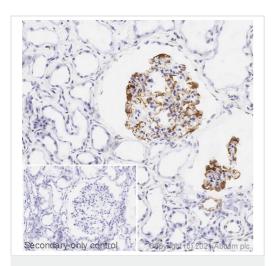
Insert x20 magnification.

TU-tumor; P-parenchyma; V-ventricle; CP-choroid plexus (From Figure 3C of Malchenko et al)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nestin antibody [SP103] (ab105389)

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



Immunohistochemistry (Frozen sections) - Anti-Nestin antibody [SP103] (ab105389) IHC image of Nestin staining in a section of frozen normal human kidney* performed on a Leica BOND™ system using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with ab105389, 5ugml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

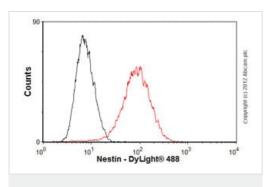
*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre

Anti-Nestin antibody [SP103] (ab105389) at 1/100 dilution + HeLa cell lysate

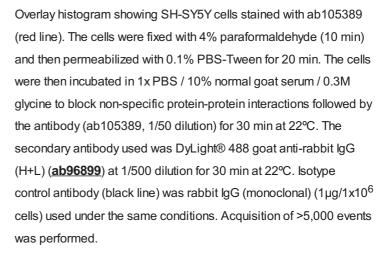
Predicted band size: 177 kDa

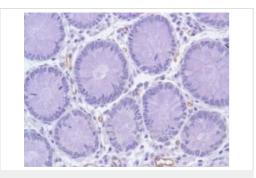


Western blot - Anti-Nestin antibody [SP103] (ab105389)



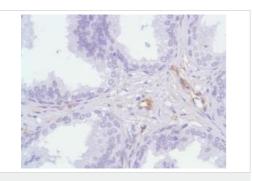
Flow Cytometry (Intracellular) - Anti-Nestin antibody [SP103] (ab105389)





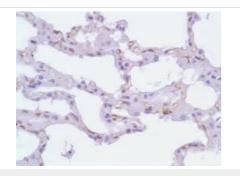
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nestin antibody [SP103] (ab105389)

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



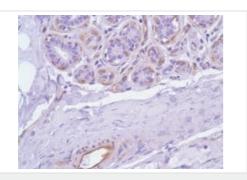
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nestin antibody [SP103] (ab105389)

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



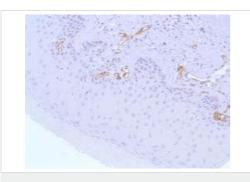
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nestin antibody [SP103] (ab105389)

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



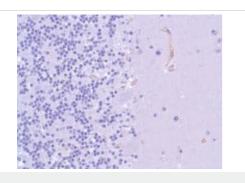
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nestin antibody [SP103] (ab105389)

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



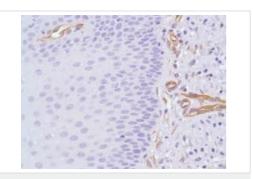
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nestin antibody [SP103] (ab105389)

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



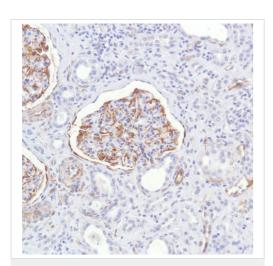
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nestin antibody [SP103] (ab105389)

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



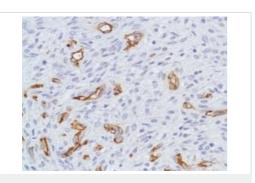
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nestin antibody [SP103] (ab105389)

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



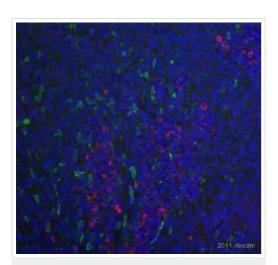
Formalin-fixed, paraffin-embedded human kidney tissue stained for Nestin using ab105389 at 1/100 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nestin antibody [SP103] (ab105389)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nestin antibody [SP103] (ab105389)

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

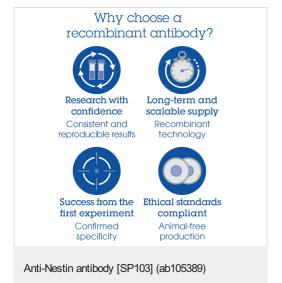


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nestin antibody [SP103] (ab105389)

This image is courtesy of Hongwei Shao by Abreview.

ab105389 staining Nestin in human melanoma tissue by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections).

Tissue was fixed in formaldehyde and a heat mediated antigen retrieval step was performed using Tris EDTA pH 9.0. Samples were then permeabilized using 0.25% Triton X-100, blocked, then incubated with ab105389 at a 1/100 dilution for 18 hours at 4°C. The secondary used was an Alexa-Fluor 594 (red) conjugated donkey anti-rabbit polyclonal used at a 1/100 dilution. (Green) tumor cells, (blue) DAPI.



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