abcam

Product datasheet

Anti-Nestin antibody [Rat-401] - Neural Stem Cell Marker ab6142

28 Abreviews 209 References 4 图像

概述

产品名称	Anti-Nestin抗体[Rat-401] - Neural Stem Cell Marker
描述	小鼠单克隆抗体[Rat-401] to Nestin - Neural Stem Cell Marker
宿主	Mouse
经测试应用	**适用于:** IHC-P, WB
种属反应性	**与反应:** Mouse, Rat **不与反应:** Sheep, Cat, Monkey
免疫原	Tissue, cells or virus corresponding to Rat Nestin. Homogenized spinal cord tissue from embryonic day 15 (E15) rats.
阳性对照	WB: Mouse brain and rat brain whole tissue lysates. IHC-P: Rat Brain 6 weeks (cerebellum sagittal, coronal rest) tissue sections.
常规说明	This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**. 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 long term. Avoid freeze / thaw cycle.
存储溶液	Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine
纯度	Protein G purified
克隆	单克隆
克隆编号	Rat-401

同种型	IgG1

应用

The Abpromise guarantee Abpromise™承诺保证使用ab6142于以下的经测试应用

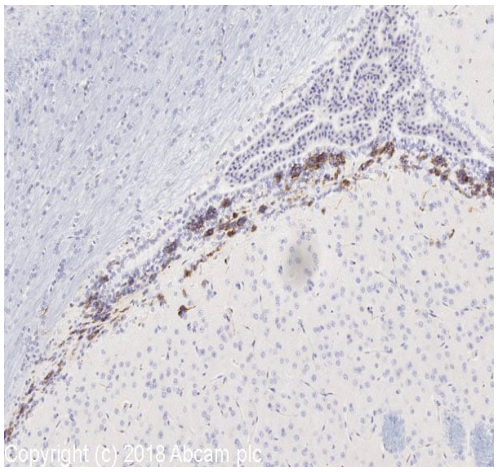
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P	★★★★★ (8)	Use a concentration of 0.05 - 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Tissue fixed with 4% paraformaldehyde at pH 7.4 for light microscopy.
WB	★★★★☆ (3)	Use a concentration of 1 µg/ml. Predicted molecular weight: 200 kDa. Block with milk or BSA but do not dilute primary antibody in buffer containing milk.

靶标

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.

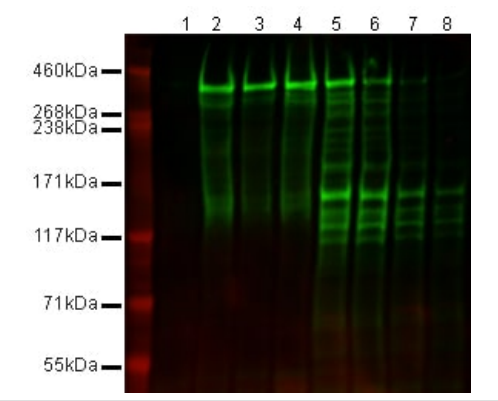
图片



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nestin antibody [Rat-401] - Neural Stem Cell Marker (ab6142)

IHC image of Nestin staining in a section of formalin-fixed paraffin-embedded normal rat brain performed on a Leica BOND™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab6142, 0.05ug/ml, 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 hematoxylin and mounted with DPX.

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.



Western blot - Anti-Nestin antibody [Rat-401] - Neural Stem Cell Marker (ab6142)

All lanes : Anti-Nestin antibody [Rat-401] - Neural Stem Cell Marker (ab6142) at 1 µg/ml

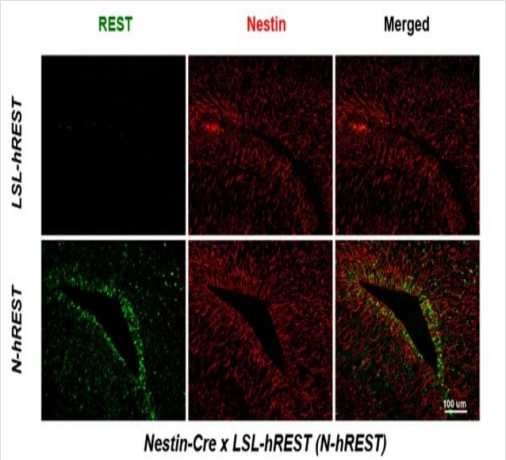
Lane 1 : Mouse E12 brain tissue lysate
Lane 2 : Mouse E14 brain tissue lysate
Lane 3 : Mouse E16 brain tissue lysate
Lane 4 : Mouse E18 brain tissue lysate
Lane 5 : Rat E12 brain tissue lysate
Lane 6 : Rat E14 brain tissue lysate
Lane 7 : Rat E16 brain tissue lysate
Lane 8 : Rat E18 brain tissue lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 200 kDa

This blot was produced using a 3-8% Tris-Acetate gel under the Tris-Acetate buffer system. The gel was run at 150V for 60 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% milk before being incubated with ab6142 overnight at 4°C. Antibody binding was detected using Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) at 1/20000 dilution for 1 hour at room temperature before imaging.

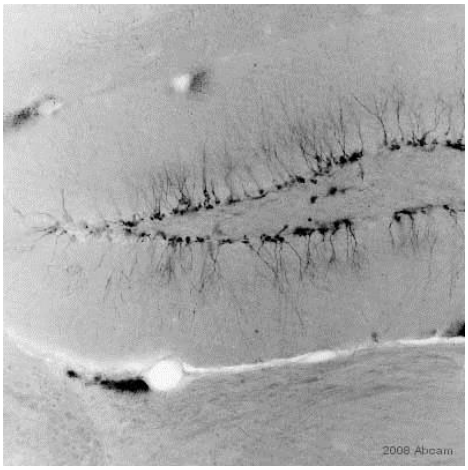


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nestin antibody [Rat-401] - Neural Stem Cell Marker (ab6142)

Image from Lu L. et al., Sci Rep. 2018 Aug 14;8(1):12083. Fig2b. doi: 10.1038/s41598-018-29441-3. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/.

REST expression in *N-hREST* mouse brains correlates with stemness in embryonic neural stem cells. Immunofluorescence analysis of E18.5 *N-hREST* and *LSL-hREST*control littermate mouse brains with antibodies against REST (using an antibody that preferentially recognizes hREST over mouse REST) and Nestin (using ab6142)

Mice were anesthetized and perfused with phosphate-buffered saline followed by 4% paraformaldehyde (PFA). Brain tissues were then dissected and fixed in 4% PFA overnight at 4 °C. Fixed brain tissues were processed for paraffin embedding and then cut into 5-µm sections.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nestin antibody [Rat-401] - Neural Stem Cell Marker (ab6142)

This image is courtesy of an anonymous abreview.

ab6142 staining adult mouse brain tissue section by Immunohistochemistry (Formalin/PFA-fixed, paraffin embedded sections). Tissue underwent fixation in paraformaldehyde, heat mediated antigen retrieval in Sodium Citrate, permeabilization in 1% Triton buffer and blocking in 10% serum for 1 hour at 25°C. The primary antibody, diluted 1/200 (PBS, 2% Donkey serum, 0.2% Triton) for 16 hours at 4°C. An Alexa Fluor® 488 conjugated donkey polyclonal to mouse Ig, diluted 1/500 was used as the secondary.

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