abcam

Product datasheet

Anti-Nestin antibody [10C2] - Neural Stem Cell Marker ab22035

8 Abreviews 137 References 4 Images

Overview

Product name	Anti-Nestin antibody [10C2] - Neural Stem Cell Marker
Description	Mouse monoclonal [10C2] to Nestin - Neural Stem Cell Marker
Host species	Mouse
Tested applications	**Suitable for:** ICC, WB
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment corresponding to Human Nestin aa 1-1621. Database link: **P48681**
Positive control	WB: U251 cells. ICC: U251 cells. Human brain tissue.
General notes	Monoclonal antibody 10C2 was derived by fusion of P3x63Ag8.653 myeloma cells with spleen cells from a BALB/c mouse immunized with a 150-amino-acid fragment from the cloned human nestin, conjugated to glutathione S-transferase. 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

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.09% Sodium azide Constituent: 59% PBS
Purity	Protein G purified
Clonality	Monoclonal
Clone number	10C2
Isotype	IgG1

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab22035 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC		Use at an assay dependent concentration.
WB		1/1000 - 1/5000. Predicted molecular weight: 176 kDa. 1/1000 - 1/5000 using chemiluminescent detection. Predicted molecular weight: 176 kDa.

Target

Function 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.

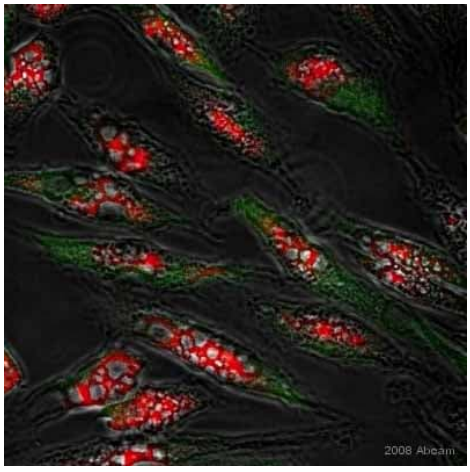
Tissue specificity CNS stem cells.

Sequence similarities Belongs to the intermediate filament family.

Developmental stage Upon terminal neural differentiation, nestin is down-regulated and replaced by neurofilaments.

Post-translational modifications Constitutively phosphorylated. This increases during mitosis when the cytoplasmic intermediate filament network is reorganized.

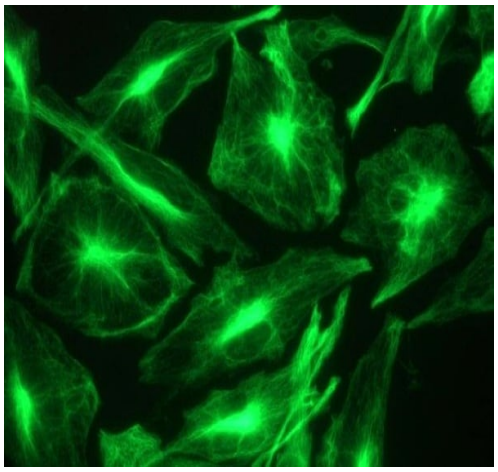
Images



Immunocytochemistry - Anti-Nestin antibody [10C2] - Neural Stem Cell Marker (ab22035)

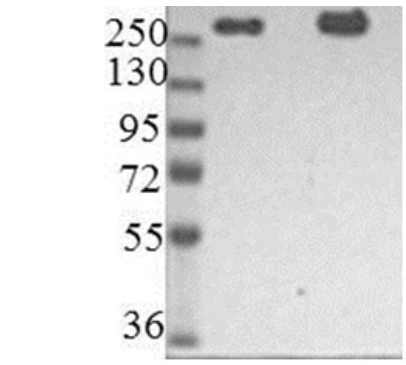
This image is courtesy of an Abreview submitted by Dr Amal Shervington

ab22035 staining human brain tissue cells by ICC/IF. Cells were PFA fixed and permeabilized in Triton X-100 prior to blocking in 1% BSA for 30 minutes at 21°C. The primary antibody was diluted 1/100 and incubated with the samples for 1 hour at 21°C. A FITC conjugated goat anti-mouse IgG antibody, diluted 1/250, was used as the secondary.



Immunocytochemistry - Anti-Nestin antibody [10C2] - Neural Stem Cell Marker (ab22035)

ICC/IF of U251 cells staining intracellular Nestin filaments with ab22035



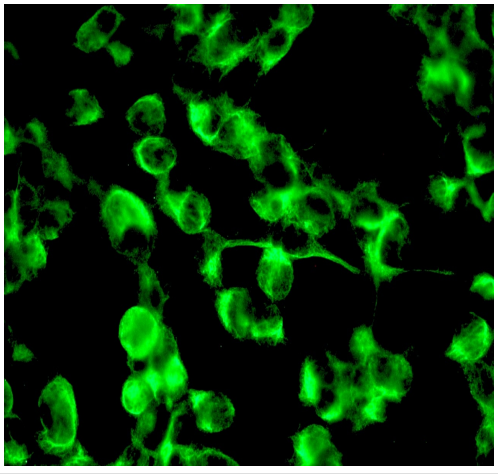
Western blot - Anti-Nestin antibody [10C2] - Neural Stem Cell Marker (ab22035)

Lane 1 : Anti-Nestin antibody [10C2] - Neural Stem Cell Marker (ab22035) at 1/1000 dilution
Lane 2 : Anti-Nestin antibody [10C2] - Neural Stem Cell Marker (ab22035)

Lane 1 : U251 cells at 10 µl
Lane 2 : U251 cells at 20 µl

Predicted band size: 176 kDa

Exposure time: 60 seconds



Immunocytochemistry - Anti-Nestin antibody [10C2] - Neural Stem Cell Marker (ab22035)

Immunostaining of intracellular nestin filaments in cultured SH-SY-5Y neuronal cells using ab22035 (1:100 dilution).

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