abcam

Product datasheet

Anti-Nestin antibody - Neural Stem Cell Marker ab7659

9 Abreviews 17 References 2 Images

Overview

Product name	Anti-Nestin antibody - Neural Stem Cell Marker
Description	Rabbit polyclonal to Nestin - Neural Stem Cell Marker
Host species	Rabbit
Specificity	Detects a band at 200kDa representing Nestin in MEFs. Denaturing of WB protein lysate causes loss of Nestin immunoreactivity in WB.
Tested applications	**Suitable for:** WB **Unsuitable for:** ICC/IF or IHC-P
Species reactivity	**Reacts with:** Mouse **Predicted to work with:** Rat, Rabbit, Hamster
Immunogen	Synthetic peptide: ALETESQDSAEPSGSEE , corresponding to amino acids 1481-1497 of Human Nestin. Run BLAST with Run BLAST with
General notes	ab7659 has been upgraded from Fast Track status based on data obtained in a new batch of this antibody. 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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 0.42% Potassium phosphate, 0.87% Sodium chloride
Purity	Immunogen affinity purified

Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab7659 in the following tested applications.

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

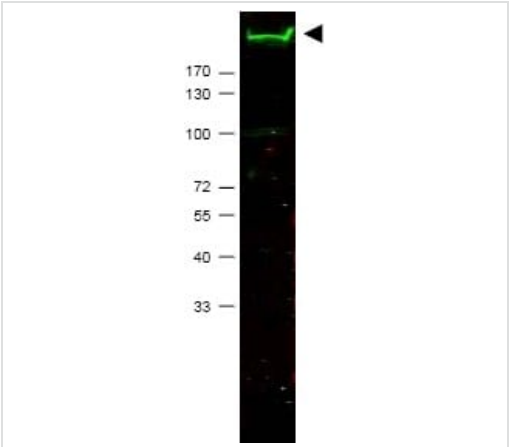
Application	Abreviews	Notes
WB	★★★★★ **(1)**	1/500 - 1/3000. Detects a band of approximately 200 kDa (predicted molecular weight: 176 kDa). Do not denature WB protein lysate, denaturing results in loss of Nestin specific immunoreactivity (See Abreview).

Application notes Is unsuitable for ICC/IF or IHC-P.

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



Western blot - Anti-Nestin antibody - Neural Stem Cell Marker (ab7659)

Anti-Nestin antibody - Neural Stem Cell Marker (ab7659) at 1/2000 dilution + MEF whole cell lysate at 30 µg

Secondary

IRDye 800

conjugated Goat anti-Rabbit IgG [H&L] at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 176 kDa

Observed band size: 200 kDa

Western blot - Anti-Nestin antibody - Neural Stem Cell Marker (ab7659)

This image is courtesy of Randal Moldrich, CNRS UMR7637, ESPCI, France

All lanes : Anti-Nestin antibody - Neural Stem Cell Marker (ab7659) at 1 µg/ml

Lane 1 : Mouse neural precursors whole cell lysate reduced but not denatured
Lane 2 : Mouse neural precursors whole cell lysate reduced and denatured

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat anti-rabbit IgG HRP at 1/20000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 176 kDa
Observed band size: 230 kDa

Exposure time: 10 minutes

A slightly higher band obtained than expected, but as predicted in the datasheet. Denaturing of the WB lysate results in a loss of Nestin specific immunoreactivity. NB: Equal protein loading was verified.

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