# abcam

# Product datasheet

# Anti-Nestin antibody [196908] ab6320





★★★★★★ <u>5 Abreviews</u> <u>48 References</u> 2 Images

#### Overview

**Product name** Anti-Nestin antibody [196908]

**Description** Mouse monoclonal [196908] to Nestin

**Host species** Mouse

Specificity Based on the result of immunocytochemistry on mouse and rat neural stem cells, this antibody has

no reactivity with rodent Nestin. The clone number has been updated from (3k1) to (196908) both

clone numbers name the same antibody clone.

**Tested applications** Suitable for: WB, ICC/IF

Reacts with: Human Species reactivity

Does not react with: Mouse, Rat

**Immunogen** Nestin-transfected NS0 cells transfected with a human Nestin fragment aa residues 618-1618.

Positive control Human neural progenitors and A172 cells.

**General notes** 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 and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

Storage buffer pH: 7.40

Constituents: PBS, 5% Trehalose

**Purity** Protein G purified

Clonality Monoclonal

Clone number 196908

Myeloma NS0

lsotype lgG1

## **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab6320 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	<b>★★★★☆</b> (1)	Use at an assay dependent concentration. Predicted molecular weight: 177 kDa.
ICC/IF	<b>★★★★☆ (1)</b>	Use at an assay dependent concentration.

## **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.

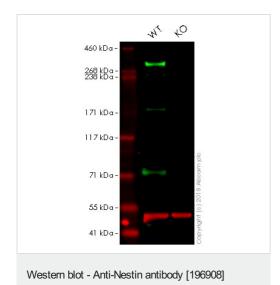
**Developmental stage**Upon terminal neural differentiation, nestin is down-regulated and replaced by neurofilaments.

**Post-translational** Constitutively phosphorylated. This increases during mitosis when the cytoplasmic intermediate

**modifications** filament network is reorganized.

# **Images**

(ab6320)



All lanes: Anti-Nestin antibody [196908] (ab6320) at 1 µg

Lane 1: Wild-type HAP1 whole cell lysate

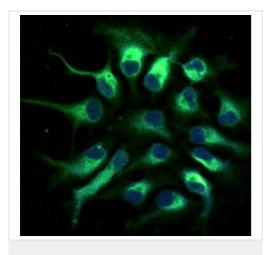
Lane 2: NES knockout HAP1 whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 177 kDa

**Lanes 1 - 2:** Merged signal (red and green). Green - ab6320 observed at 300 kDa. Red - loading control, **ab176560**, observed at 50 kDa.

ab6320 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. Ab6320 and <a href="mailto:ab176560">ab176560</a> (Rabbit antialpha Tubulin loading control) were incubated overnight at 4°C at 1 µg/ml and 1/20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed <a href="mailto:ab216772">ab2167772</a> and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed <a href="mailto:ab216777">ab2167777</a> secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-Nestin antibody [196908] (ab6320) Immunocytochemical analysis of human fetal neural progenitor cells, labeling Nestin with ab6320 ( $10\mu g/ml$ ). Immunostaining was for 3 hours at room temperature. Counterstaining with DAPI (blue).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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