


Anti-Nestin antibody [SP103] - BSA and Azide free ab271870

KO VALIDATED Recombinant RabMAB

[14 Images](#)

Overview

Product name	Anti-Nestin antibody [SP103] - BSA and Azide free
Description	Rabbit monoclonal [SP103] to Nestin - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF, IHC-P, Flow Cyt (Intra), IHC-Fr
Species reactivity	Reacts with: Human Predicted to work with: Dog 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Human kidney, ovary, cervix, breast, colon, endometrium, cerebellum, lung, prostate, skin and human melanoma tissue. Flow Cyt (intra): SH-SY5Y cells. ICC/IF: SKNSH cells.
General notes	<p>ab271870 is the carrier-free version of ab105389.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit</p>

monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](#).

This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.20 Constituent: PBS
Carrier free	Yes
Purity	Protein A/G purified
Clonality	Monoclonal
Clone number	SP103
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab271870 in the following tested applications.

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

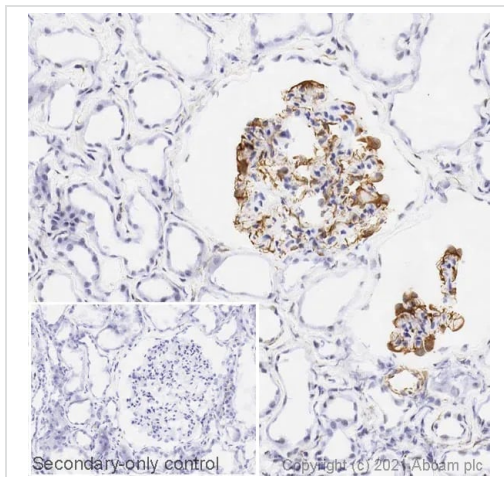
Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 177 kDa.
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Antigen retrieval: Boil tissue section in 10mM citrate buffer, pH 6.0 for 10 min followed by cooling at room temperature for 20 min.
Flow Cyt (Intra)		Use at an assay dependent concentration. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IHC-Fr		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 modifications	Constitutively phosphorylated. This increases during mitosis when the cytoplasmic intermediate filament network is reorganized.

Images



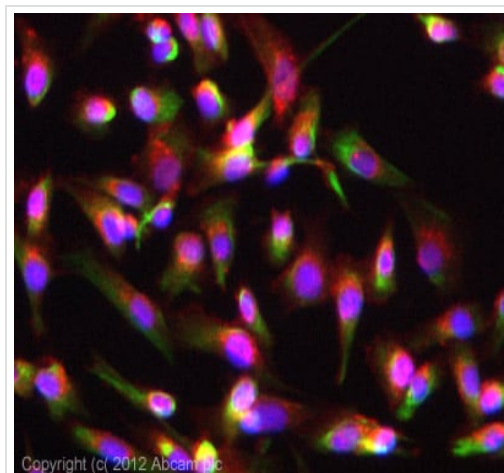
Immunohistochemistry (Frozen sections) - Anti-Nestin antibody [SP103] - BSA and Azide free (ab271870)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([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](#), 5ug/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 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.

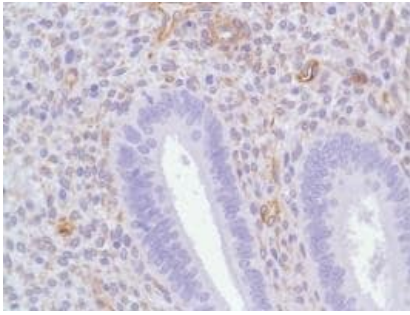
**Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre*



Immunocytochemistry/ Immunofluorescence - Anti-Nestin antibody [SP103] - BSA and Azide free (ab271870)

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.

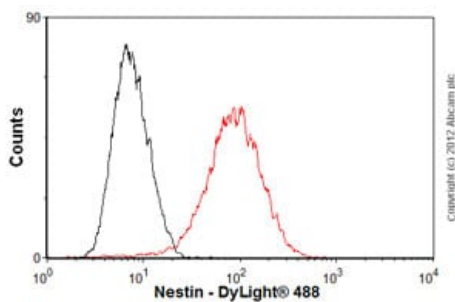
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab105389](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nestin antibody [SP103]
- BSA and Azide free (ab271870)

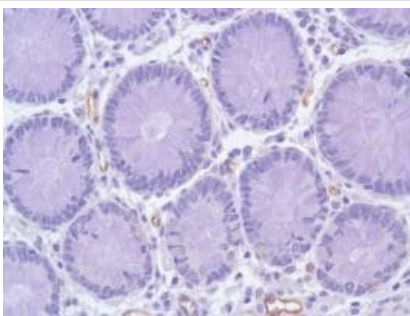
Formalin-fixed, paraffin-embedded human endometrium tissue stained for Nestin using **ab105389** at 1/100 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab105389**).



Flow Cytometry (Intracellular) - Anti-Nestin antibody [SP103] - BSA and Azide free (ab271870)

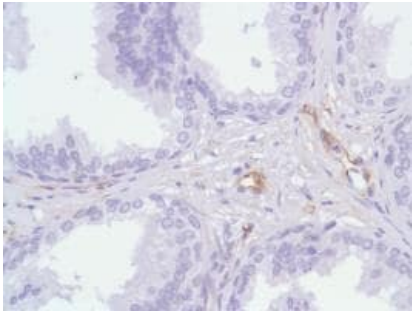
Overlay histogram showing SH-SY5Y cells stained with **ab105389** (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (**ab105389**, 1/50 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) (**ab96899**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab105389**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nestin antibody [SP103]
- BSA and Azide free (ab271870)

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

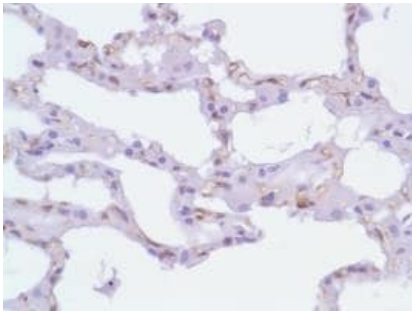
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab105389**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nestin antibody [SP103]
- BSA and Azide free (ab271870)

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

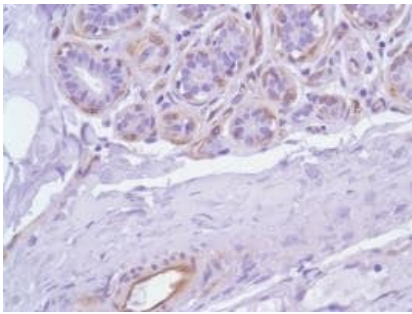
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab105389](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nestin antibody [SP103]
- BSA and Azide free (ab271870)

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

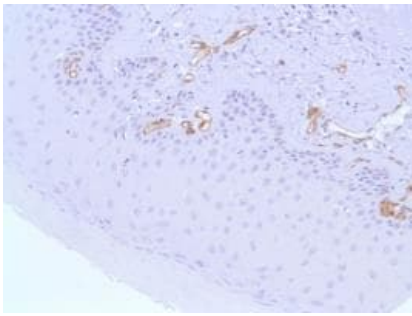
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab105389](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nestin antibody [SP103]
- BSA and Azide free (ab271870)

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

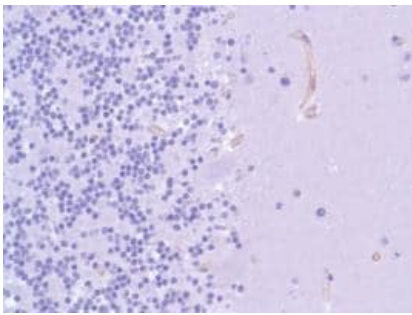
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab105389](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nestin antibody [SP103]
- BSA and Azide free (ab271870)

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

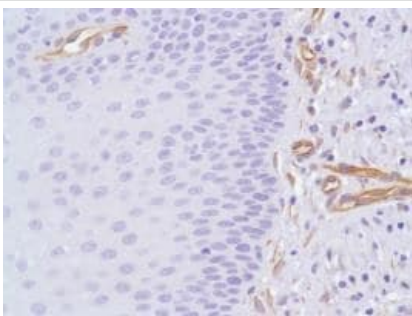
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab105389](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nestin antibody [SP103]
- BSA and Azide free (ab271870)

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

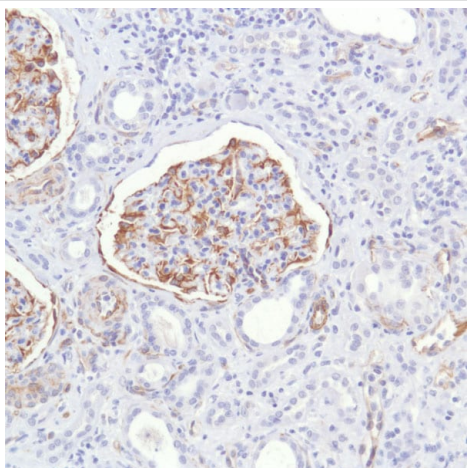
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab105389](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nestin antibody [SP103]
- BSA and Azide free (ab271870)

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

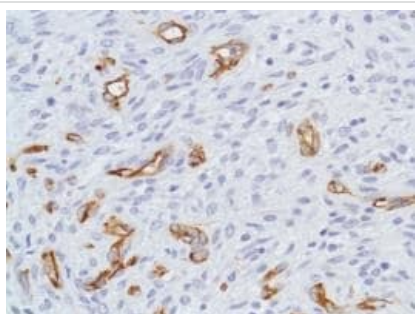
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab105389](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nestin antibody [SP103]
- BSA and Azide free (ab271870)

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab105389](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nestin antibody [SP103]
- BSA and Azide free (ab271870)

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab105389](#)).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Nestin antibody [SP103] - BSA and Azide free (ab271870)

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

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