

**Anti-Nestin Picoband Antibody**  
**Catalog # ABO12560****Specification**

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**Anti-Nestin Picoband Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P48681</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Protein Mdm4(MDM4) detection. Tested with WB, IHC-P, IHC-F in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Nestin Picoband Antibody - Additional Information**

**Gene ID** 10763

**Other Names**

Nestin, NES

**Calculated MW**

177439 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, By Heat<br>Immunohistochemistry(Frozen Section), 0.5-1 µg/ml<br><br>Western blot, 0.1-0.5 µg/ml<br>

**Tissue Specificity**

CNS stem cells.

**Protein Name**

Nestin

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human Nestin (252-290aa ERLRATEKFQLAVEALEQEKQGLQSQIAQVLEGRQQLAH), different from the related mouse sequence by four amino acids, and from the related rat sequence by five amino acids.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins.

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-Nestin Picoband Antibody - Protein Information****Name** NES**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 (By similarity).

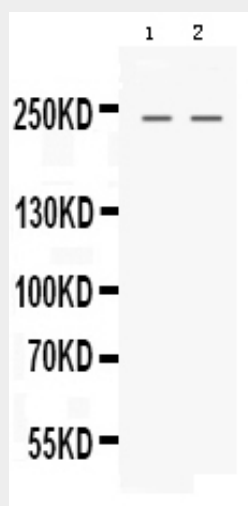
**Tissue Location**

CNS stem cells.

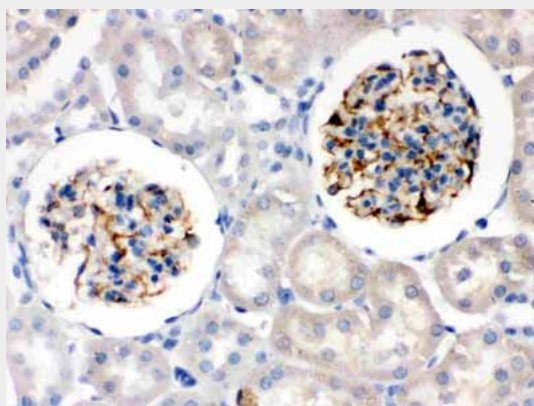
**Anti-Nestin Picoband Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

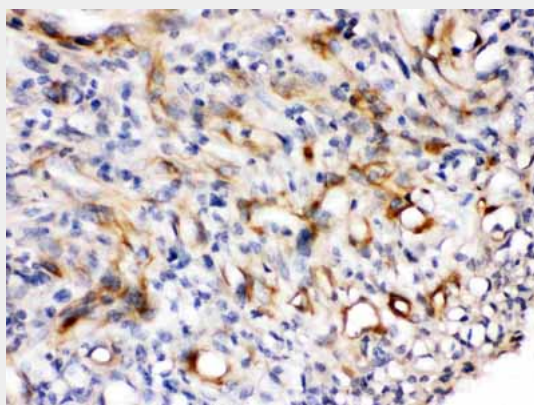
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-Nestin Picoband Antibody - Images**

Western blot analysis of Nestin expression in HELA whole cell lysates (lane 1) and HEPG2 whole cell lysates (lane 2). Nestin at 230KD was detected using rabbit anti- Nestin Antigen Affinity purified polyclonal antibody (Catalog # ABO12560) at 0.5  $\mu$ g/mL. The blot was developed using chemiluminescence (ECL) method .



Nestin was detected in paraffin-embedded sections of rat kidney tissues using rabbit anti- Nestin Antigen Affinity purified polyclonal antibody (Catalog # ABO12560) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method .



Nestin was detected in paraffin-embedded sections of human melanoma tissues using rabbit anti- Nestin Antigen Affinity purified polyclonal antibody (Catalog # ABO12560) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method .

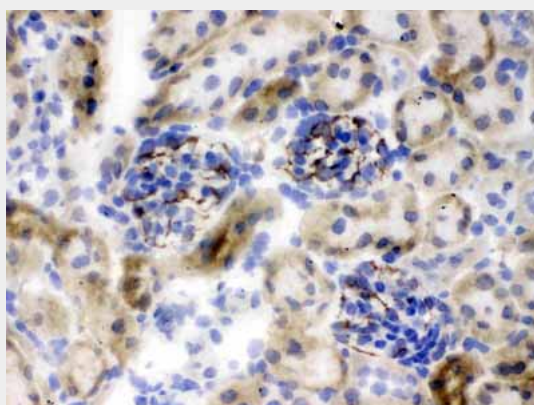


Figure 4. IHC analysis of Nestin using anti-Nestin antibody (ABO12560).Nestin was detected in frozen section of mouse kidney tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1  $\mu$ g/ml rabbit anti-Nestin Antibody (ABO12560) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody

and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

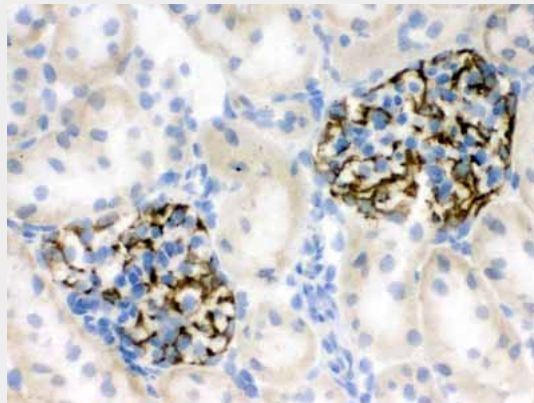


Figure 5. IHC analysis of Nestin using anti-Nestin antibody (ABO12560). Nestin was detected in frozen section of rat kidney tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 $\mu$ g/ml rabbit anti-Nestin Antibody (ABO12560) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

#### **Anti-Nestin Picoband Antibody - Background**

Nestin is a type VI intermediate filament (IF) protein that in humans is encoded by the NES gene. This gene is mapped to 1q23.1. Distribution and expression of nestin in mitotically active cells suggests it plays a role in regulation of the assembly and disassembly of intermediate filaments, which, together with other structural proteins, participate in remodeling of the cell. The role of nestin in dynamic cells, particularly structural organization of the cell, appears strictly regulated by phosphorylation, especially its integration into heterogeneous intermediate filaments together with vimentin or  $\alpha$ -internexin. Furthermore, nestin expression has been extensively used as a marker for central nervous system (CNS) progenitor cells in different contexts, based on observations indicating a correlation between nestin expression and this cell type in vivo.