

# Nestin Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2020b

## **Product Information**

Application	IHC-P, IF, E
Primary Accession	<u>P48681</u>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB2857
Calculated MW	177439
Antigen Region	1560-1590

## **Additional Information**

Gene ID	10763
Other Names	Nestin, NES
Target/Specificity	This Nestin antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1560~1590 amino acids from the C-terminal region of human nestin.
Dilution	IHC-P~~1:100~500 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Nestin Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## **Protein Information**

Name	NES
	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.

# Background

Nestin is a class VI intermediate filament protein expressed predominantly in stem cells of the neural tube but absent from virtually all differentiated CNS cells. In the CNS, nestin is downregulated upon differentiation and replaced by neurofilaments. Transient expression of nestin has been postulated as a key step committing cells to the neural differentiation pathway. Nestin expression has also been observed in pancreatic hematopoietic stem cell populations.

### References

Yaworsky, P.J., et al., Dev. Biol. 205(2):309-321 (1999). Dahlstrand, J., et al., J. Cell. Sci. 103 (Pt 2), 589-597 (1992).

#### Images



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



Immunofluorescence analysis of anti-Nestin Antibody (C-term) (Cat.#AP2020b) in HeLa cells. 0.025 mg/ml primary antibody was followed by Alexa-Fluor-546-conjugated donkey anti-rabbit lgG (H+L). Alexa-Fluor-546 emits orange fluorescence.

## Citations

- <u>Generation of four induced pluripotent stem cell lines, GZWWTi001-A, GZWTZi001-A, GZWXYi001-A, and GZWXDi001-A, derived from peripheral blood mononuclear cells from a family with asparagine synthetase deficiency</u>.
- Effects of muscarinic acetylcholine receptor stimulation on the differentiation of mouse induced pluripotent stem cells into neural progenitor cells.
- <u>Generation of GZKHQi001-A and GZWWTi001-A, two induced pluripotent stem cell lines derived from peripheral blood</u> mononuclear cells of Duchenne muscular dystrophy patients.
- <u>Generation of integration-free induced pluripotent stem cells (GZHMUi001-A) by reprogramming peripheral blood</u> <u>mononuclear cells from a 47. XXX syndrome patient.</u>
- Identification of a novel putative pancreatic stem/progenitor cell marker DCAMKL-1 in normal mouse pancreas.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.