

For Research Use Only

# Nestin Polyclonal antibody

Catalog Number: 19483-1-AP **114 Publications**



## Basic Information

<b>Catalog Number:</b> 19483-1-AP	<b>GenBank Accession Number:</b> NM_006617	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 600 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 10763	<b>Recommended Dilutions:</b> WB: 1:500-1:1000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P48681	IHC: 1:200-1:800
<b>Isotype:</b> IgG	<b>Full Name:</b> nestin	IF-P: 1:50-1:500
	<b>Calculated MW:</b> 177 kDa	IF/ICC: 1:50-1:500
	<b>Observed MW:</b> 170-180 kDa	FC (Intra): 0.40 ug per 10 <sup>6</sup> cells in a 100 µl suspension

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, IF-P, FC (Intra), ELISA	<b>Positive Controls:</b> WB : mouse brain tissue, rat brain tissue
<b>Cited Applications:</b> WB, IHC, IF	IHC : human kidney tissue, human gliomas tissue
<b>Species Specificity:</b> human, mouse, rat	IF-P : mouse kidney tissue,
<b>Cited Species:</b> human, mouse, rat, monkey, zebrafish	IF/ICC : SH-SY5Y cells, U-251 cells
<b>Note-IHC:</b> suggested antigen retrieval with <b>TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	FC (Intra) : SH-SY5Y cells,

## Background Information

Nestin, also named as NES and Nbla00170, is a class VI intermediate filament protein expressed in stem cells of the central nervous system (CNS) but not in mature CNS cells. Its expression is used extensively as a marker for neural lineage cells derived from human embryonic stem (hES) and induced pluripotent stem (iPS) cells. Nestin is also expressed in non-neural stem cell populations such as pancreatic islet progenitors and hematopoietic progenitors. Nestin can be detected as 220-240 kDa and 240-280 kDa. Studies point toward nestin heavy posttranslational modifications as possibly serving particular functions in podocytes and in a few other particular cell types (PMID: 17210924).

## Notable Publications

Author	Pubmed ID	Journal	Application
Chenlong Li	31558707	Cell Death Dis	WB
Lili Ma	36132985	J Immunol Res	IF
Jiansheng Chen	31511040	J Exp Clin Cancer Res	WB

## Storage

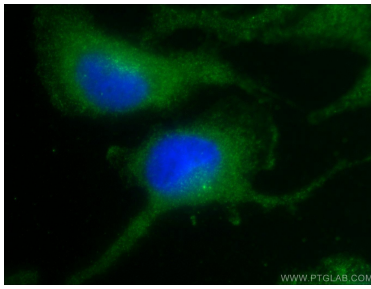
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

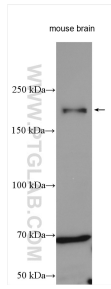
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

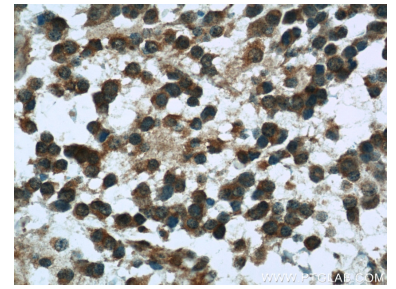
## Selected Validation Data



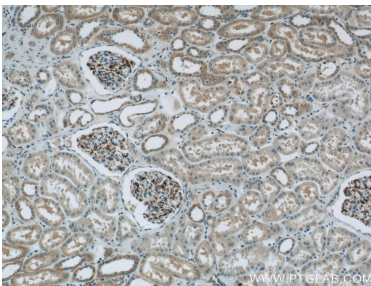
Immunofluorescent analysis of U-251 cells using 19483-1-AP (Nestin antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



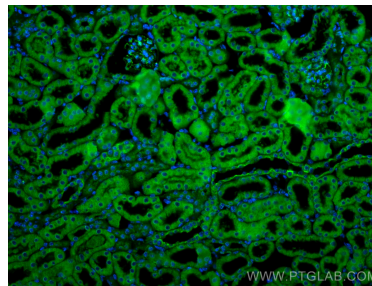
Mouse brain lysates were subjected to SDS PAGE followed by western blot with 19483-1-AP (Nestin antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



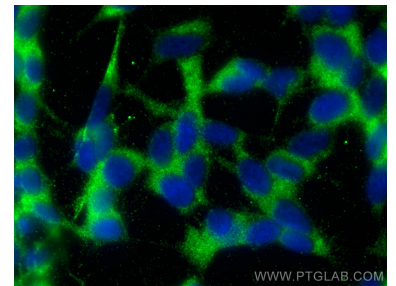
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 19483-1-AP (Nestin Antibody) at dilution of 1:100 (under 40x lens).



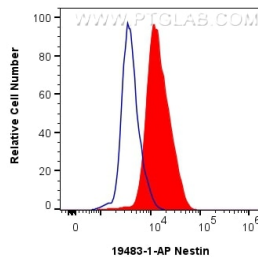
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 19483-1-AP (Nestin Antibody) at dilution of 1:400 (under 10x lens).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse kidney tissue using Nestin antibody (19483-1-AP) at dilution of 1:200 and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed SH-SY5Y cells using Nestin antibody (19483-1-AP) at dilution of 1:200 and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1x10<sup>6</sup> SH-SY5Y cells were intracellularly stained with 0.4 ug Nestin Polyclonal antibody (19483-1-AP) and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.4 ug Rabbit IgG control Rabbit PolyAb (30000-O-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).