

For Research Use Only

# Nestin Polyclonal antibody

Catalog Number: 19483-1-AP

114 Publications



## Basic Information

### Catalog Number:

19483-1-AP

### Concentration:

600 ug/ml

### Source:

Rabbit

### Isotype:

IgG

### GenBank Accession Number:

NM\_006617

### GeneID (NCBI):

10763

### UNIPROT ID:

P48681

### Full Name:

nestin

### Calculated MW:

177 kDa

### Observed MW:

170-180 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:500-1:1000

IHC: 1:200-1:800

IF-P: 1:50-1:500

IF/ICC: 1:50-1:500

FC (Intra): 0.40 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IF-P, FC (Intra), ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, monkey, zebrafish

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

WB : mouse brain tissue, rat brain tissue

IHC : human kidney tissue, human gliomas tissue

IF-P : mouse kidney tissue,

IF/ICC : SH-SY5Y cells, U-251 cells

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

For technical support and original validation data for this product please contact:

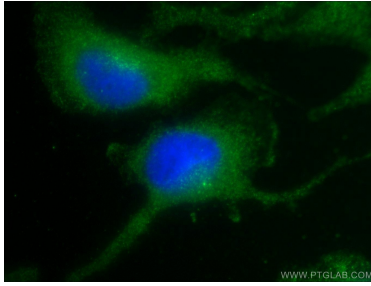
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

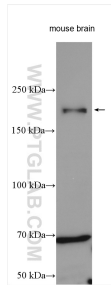
W: [ptgcn.com](http://ptgcn.com)

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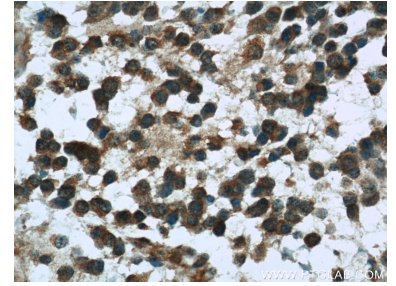
## Selected Validation Data



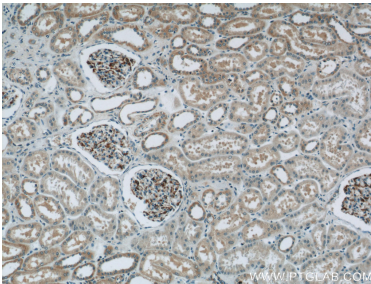
Immunofluorescent analysis of U-251 cells using 19483-1-AP (Nestin antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



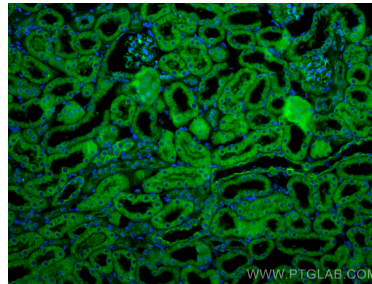
Mouse brain lysates were subjected to SDS PAGE followed by western blot with 19483-1-AP (Nestin antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



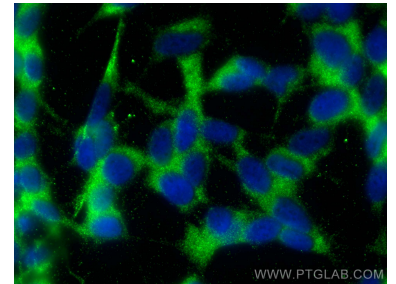
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 19483-1-AP (Nestin Antibody) at dilution of 1:100 (under 40x lens).



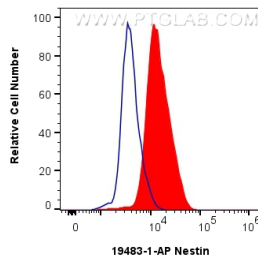
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 19483-1-AP (Nestin Antibody) at dilution of 1:400 (under 10x lens).



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).



$1 \times 10^6$  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).