

# Product Datasheet

## Nestin Antibody (10C2) - BSA Free NB300-266

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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**Reviews: 2 Publications: 27**

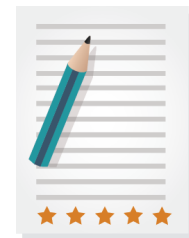
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Updated 10/23/2024 v.20.1

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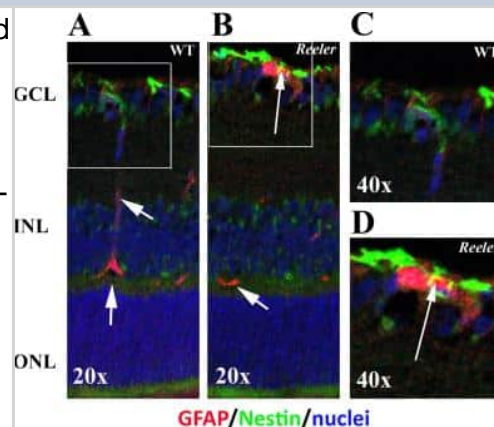
**NB300-266**

Nestin Antibody (10C2) - BSA Free

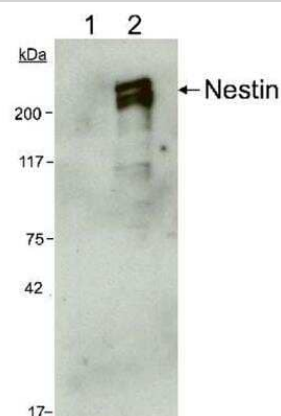
Product Information	
Unit Size	0.1 ml
Concentration	2.4 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	10C2
Preservative	0.1% Sodium Azide
Isotype	IgG1 Kappa
Purity	Protein G purified
Buffer	PBS
Product Description	
Host	Mouse
Gene ID	10763
Gene Symbol	NES
Species	Human, Mouse, Rabbit (Negative), Rat (Negative)
Reactivity Notes	This antibody does not cross-react with rat or rabbit.
Marker	Neural Stem Cell Marker
Immunogen	A fragment of the human Nestin protein corresponding to residues 1464-1614. [UniProt P48681]
Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, CyTOF-ready
Recommended Dilutions	Western Blot 1:1000 - 1:5000, Flow Cytometry 1 ug per million cells, Immunohistochemistry 1:100 - 1:200, Immunocytochemistry/ Immunofluorescence 1:50 - 1:200, Immunohistochemistry-Paraffin 1:100 - 1:200, Immunohistochemistry-Frozen 1:100 - 1:200, CyTOF-ready
Application Notes	This Nestin (10C2) antibody is useful for Immunohistochemistry on formaldehyde fixed cultured cells and formalin fixed paraffin-embedded tissue sections. In Western blot a doublet band is seen at ~220-240 kDa. The investigator should determine the optimal working dilution for a specific application. This antibody is CyTOF ready.

## Images

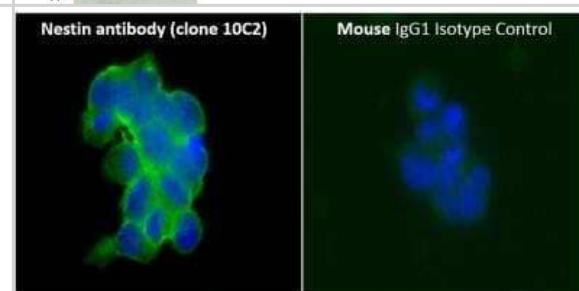
**Immunohistochemistry: Nestin Antibody (10C2) [NB300-266] - GFAP and Nestin immunoreactivity in retinal sections.** Epifluorescent acquisition of p28 Reeler and WT retinas. (A-D) As compared to WT, both GFAP (red) and Nestin (green) immunoreactivities were highly visible in Reeler retinas (AB, GCL). Arrows point at yellow immunoreactivity in the white frame (B) indicating GFAP and Nestin co-expression in cells having long-filaments (activated Muller cells), as compared to wild type (arrowheads in A). Nuclei were DAPI counterstained (blue). Image collected and cropped by CiteAb from the following publication ([//doi.org/10.1371/journal.pone.0212732](https://doi.org/10.1371/journal.pone.0212732)) licensed under a CC-BY license.



**Western Blot: Nestin Antibody (10C2) [NB300-266] - WB analysis of 5 ug lysate from (1) Rat's total brain tissue, and (2) human CNS progenitor cells using Nestin antibody (clone 10C2) at 1:1000 dilution.** The antibody did not react with rat, whereas, in lysate from human samples, it generated a doublet band representing the phosphorylated and the non-phosphorylated forms of Nestin protein.

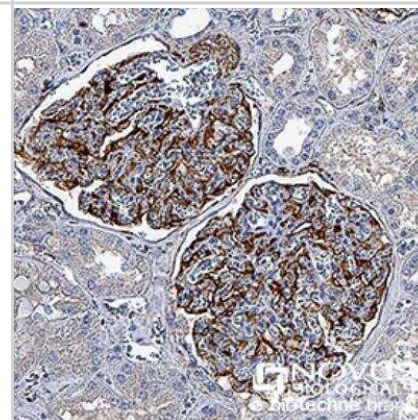


**Immunocytochemistry/Immunofluorescence: Nestin Antibody (10C2) [NB300-266] - Analysis of formalin fixed, 0.1% Triton X-100 permeabilized F9 cells (Mouse teratocarcinoma) using Nestin antibody (clone 10C2) at 1:50 dilution.** The primary antibody was detected using Alexa Fluor 488 labeled donkey anti-mouse IgG (H+L) cross-adsorbed secondary antibody (green) and nuclei were counterstained with DAPI (blue). An isotype control set was incubated with mouse IgG1 isotype control antibody and the above mentioned secondary antibody. Nestin antibody (clone 10C2) generated a specific membrane-cytoplasmic staining of Nestin while the isotype control samples did not show any staining under same assay conditions.

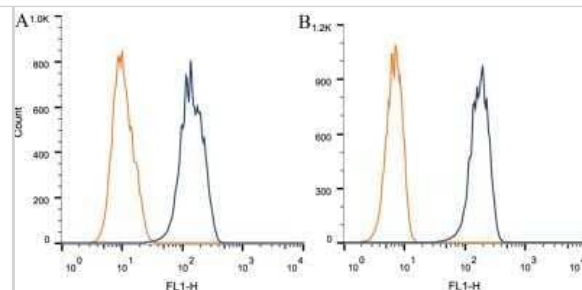


**Immunohistochemistry-Paraffin: Nestin Antibody (10C2) [NB300-266] - Nestin was detected in immersion fixed paraffin-embedded sections of human kidney using anti-human mouse monoclonal antibody (Catalog # NB300-266) at 1:500 dilution overnight at 4C.** Tissue was stained using the VisuCyte anti-mouse HRP polymer detection reagent (Catalog # VC001) with DAB chromogen (brown) and counterstained with hematoxylin (blue).

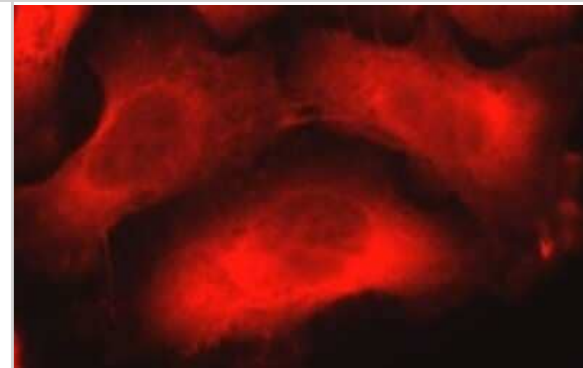
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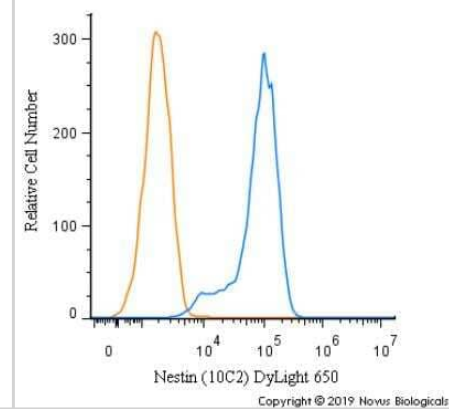
Flow Cytometry: Nestin Antibody (10C2) [NB300-266] - Intracellular flow cytometric staining of  $1 \times 10^6$  CHO (A) and HEK-293 (B) cells using Nestin antibody (dark blue). Isotype control shown in orange. An antibody concentration of  $1 \mu\text{g}/1 \times 10^6$  cells was used.



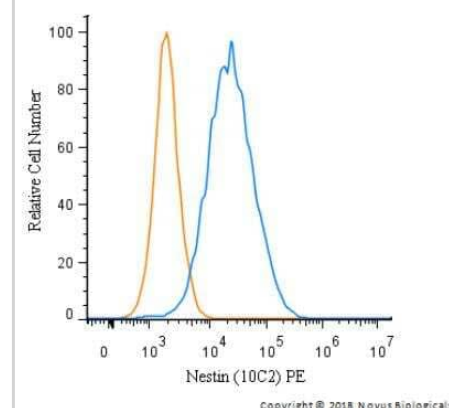
Immunocytochemistry/Immunofluorescence: Nestin Antibody (10C2) [NB300-266] - Visualization of Nestin in PC-3 cells using NB300-266. Courtesy of Dolnick Lab, Roswell Park Cancer Institute.



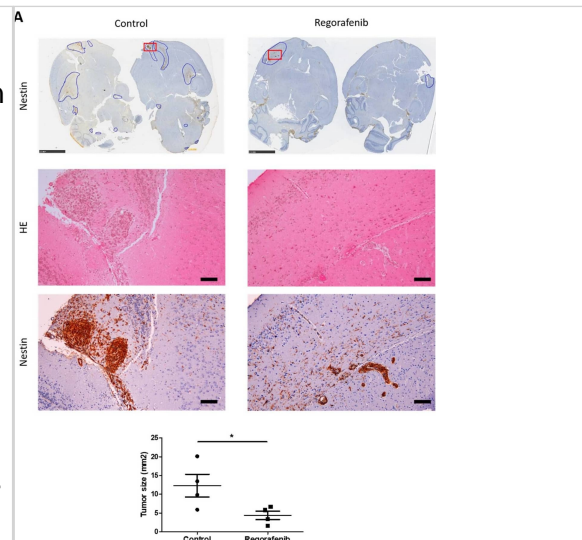
Flow Cytometry: Nestin Antibody (10C2) [NB300-266] - An intracellular stain was performed on SH-SY5Y cells with Nestin [10C2] Antibody NB300-266C (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of  $2.5 \mu\text{g}/\text{mL}$  for 30 minutes at room temperature. Both antibodies were conjugated to DyLight 650.



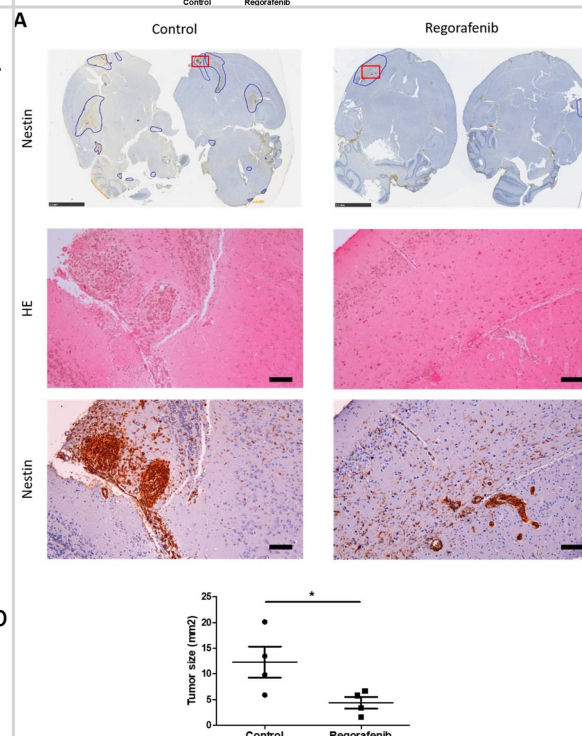
Flow Cytometry: Nestin Antibody (10C2) [NB300-266] - An intracellular stain was performed on HeLa cells with Nestin Antibody (10C2)NB300-266PE (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of  $2.5 \mu\text{g}/\text{mL}$  for 30 minutes at room temperature. Both antibodies were conjugated to phycoerythrin.



**Immunohistochemistry: Nestin Antibody (10C2) - BSA Free [NB300-266]**  
 - Regorafenib inhibits tumour growth and vascularisation in xenograft mice. GC1 were implanted into the right forebrain of mice. The mice then received daily oral vehicle or regorafenib at 30 mg/kg for 45 days. Representative photographs of mice brain tumours treated with regorafenib (right panel) or without regorafenib (left panel) stained by hemalun-eosin (median panel) or with nestin antibody (upper and lower panel). The upper panel shows whole brains of mice stained with nestin antibody. The tumour areas were circled in blue, and each surface was measured in mm<sup>2</sup>. The red rectangles indicate the zone of the tumour shown in median (hemalun-eosin staining) and lower (nestin IHC) panel. Scale bars, upper panel 2.5 mm, median and lower panel 100  $\mu$ m. The graph shows the tumour size in mm<sup>2</sup> (expressed as the mean  $\pm$  SEM of 4 mice). Image collected and cropped by CiteAb from the following publication ([//pubmed.ncbi.nlm.nih.gov/35326702/](https://pubmed.ncbi.nlm.nih.gov/35326702/)) licensed under a CC-BY license.



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## Publications

García-Gómez P, Golán I, S Dadrás M et al. NOX4 regulates TGF $\beta$ -induced proliferation and self-renewal in glioblastoma stem cells *Molecular oncology* 2022-05-01 [PMID: 35203105] (IHC, Human)

### Details:

Multi-plex staining; Dilutions: 1:800

Nawfal Al-hashimi Investigating the Effect of the Amelogenin Peptide C11 on Differentiation of Stem Cells of the Apical Papilla (SCAP) toward an Odontoblastic Phenotype: A Pilot Study in Regenerative Endodontics Thesis 2022-01-01 (IHC-P, Human)

Rothermund K, Calabrese TC, Syed-Picard FN Differential Effects of Escherichia coli- Versus Porphyromonas gingivalis-derived Lipopolysaccharides on Dental Pulp Stem Cell Differentiation in Scaffold-free Engineered Tissues *Journal of endodontics* 2022-11-01 [PMID: 36108879]

Adjei-Sowah EA, O'Connor SA, Veldhuizen J et al. Investigating the Interactions of Glioma Stem Cells in the Perivascular Niche at Single-Cell Resolution using a Microfluidic Tumor Microenvironment Model *Advanced science* (Weinheim, Baden-Wuerttemberg, Germany) 2022-05-26 [PMID: 35619544] (ICC/IF, Human)

Deshors P, Arnauduc F, BoElla B et al. Impact of Regorafenib on Endothelial Transdifferentiation of Glioblastoma Stem-like Cells *Cancers* 2022-03-18 [PMID: 35326702] (IHC-P, Human)

Lo Cascio C, McNamara JB, Melendez EL et al. Nonredundant, isoform-specific roles of HDAC1 in glioma stem cells *JCI insight* 2021-09-08 [PMID: 34494550] (WB, Human)

Schmid B, Holst B, Clausen C et al. Generation of a set of isogenic iPSC lines carrying all APOE genetic variants (epsilon2/epsilon3/epsilon4) and knock-out for the study of APOE biology in health and disease *Stem cell research* 2021-02-02 [PMID: 33556820] (FLOW, ICC/IF)

Kim J, Koh H, Zhen X, et al. Establishment of iPSC (KRIBBi001-A) from CD34+ group O D-negative bone marrow blood *Stem cell research* 2021-01-26 [PMID: 33529979] (FLOW, ICC/IF, Human)

Heffernan J M, McNamara J B et al. PNIPAAm-co-Jeffamine (PNJ) scaffolds as in vitro models for niche enrichment of glioblastoma stem-like cells. *Biomaterials* 2017-01-10 [PMID: 28802102] (WB, Human)

Sabelstrom H, Petri R, Shchors K et al. Driving Neuronal Differentiation through Reversal of an ERK1/2-miR-124-SOX9 Axis Abrogates Glioblastoma Aggressiveness *Cell Rep* 2019-08-20 [PMID: 31433983] (ICC/IF, Mouse, Human)

Maxia Cristina, Murtas Daniela, Isola Michela et al. Immunophenotypic characterization of telocyte-like cells in pterygium. *Molecular Vision* 2018-12-29 [PMID: 30713424] (IHC-P, Human)

Adamska A, Pilacinski S, Zozulinska-Ziolkiewicz D et al. An increased skin microvessel density is associated with neurovascular complications in type 1 diabetes mellitus *Diab Vasc Dis Res* 2019-05-30 [PMID: 31144511] (IHC-P, Human)

More publications at <http://www.novusbio.com/NB300-266>





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### **Products Related to NB300-266**

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HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-43319-0.5mg	Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)
NB300-266R	Nestin Antibody (10C2) [DyLight 550]

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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