# **Product Datasheet**

# Nestin Antibody (4D11) - BSA Free NBP1-92717

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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# NBP1-92717

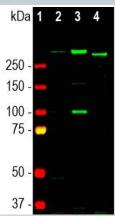
Nestin Antibody (4D11) - BSA Free

Nestin Antibody (4D11) - BSA Free	
Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	4D11
Preservative	0.035% Sodium Azide
Isotype	IgG1
Purity	Protein G purified
Buffer	50% PBS, 50% glycerol
Target Molecular Weight	240 kDa
Product Description	
Host	Mouse
Gene ID	10763
Gene Symbol	NES
Species	Human, Mouse, Rat
Marker	Neural Stem Cell Marker
Immunogen	Recombinant construct, amino acids 317-630 of the human Nestin protein expressed in and purified from E. coli. [UniProt P48681]
Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Western Blot 1:5000, Flow Cytometry, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence 1:500
Application Notes	This Nestin (4D11) antibody is useful for Immunocytochemistry/Immunofluorescence, Immunohistochemistry, and Western blot, where a band can be seen at approximately 240 kDa. IHC reported in verified customer review. Use in FLOW reported in scientific literature (PMID: 31203166).

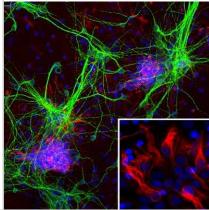


### **Images**

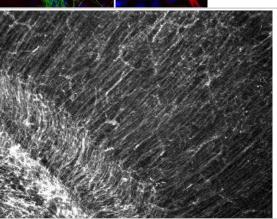
Western Blot: Nestin Antibody (4D11) [NBP1-92717] - Analysis analysis of tissue and cell lysates with mouse mAB against nestin, NBP1-92717, dilution 1:500 in green: [1] protein standard, [2] embryonic E18 rat brain, [3] C6 rat glioma cells, and [4] SH-SY5Y human neuroblastoma cells.



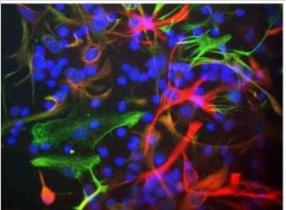
Immunocytochemistry/Immunofluorescence: Nestin Antibody (4D11) [NBP1-92717] - Analysis of cortical neuron-glial cell culture from E20 rat stained with mouse mAb to nestin, NBP1-92717, dilution 1:500 in red, and costained with chicken pAb to MAP2, dilution 1:5,000, in green. The blue is Hoechst staining of nuclear DNA. The nestin antibody labels developing astrocytes and neuronal stem cells in a clearly filamentous fashion, while the MAP2 antibody stains dendrites and perikarya of mature neurons.



Immunohistochemistry: Nestin Antibody (4D11) [NBP1-92717] - Staining in mouse cortex microslice section (from postnatal day 3). IHC image submitted by a verified customer review.



Immunocytochemistry/Immunofluorescence: Nestin Antibody (4D11) [NBP1-92717] - Mixed cultures of neonatal rat neurons and glia stained with NBP1-92717 (red), chicken antibody to Vimentin (NB300-223, green) and DNA (DAPI stain, blue). Astrocytes and neuronal stem cells stain strongly and specifically in a clearly filamentous fashion with the Nestin (4D11) antibody. The filamentous staining pattern is as expected as both Nestin and Vimentin are components of 10nm filaments. Note that some cells contain Nestin, but do not stain strongly for Vimentin and so appear red. Others contain Vimentin and not Nestin and so appear green - these are likely to be fibroblastic or endothelial cells. Some cells express both proteins and so appear yellowish.



#### **Publications**

Huang, LY;Zhang, YD;Chen, J;Fan, HD;Wang, W;Wang, B;Ma, JY;Li, PP;Pu, HW;Guo, XY;Shen, JG;Qi, SH; Maintaining moderate levels of hypochlorous acid promotes neural stem cell proliferation and differentiation in the recovery phase of stroke Neural regeneration research 2025-03-01 [PMID: 38886957]

Gabriel E, Albanna W, Pasquini G, Ramani A et Al. Generation of iPSC-derived human forebrain organoids assembling bilateral eye primordia Nat Protoc 2023-05-17 [PMID: 37198320]

Ding Y, Wang L, Ji W, Chen Z et Al. Generation of a human induced pluripotent stem cell line with Cas9 driven by Tet-on operator via AAVS1 safe harbor gene-editing Stem Cell Res 2020-11-18 [PMID: 33207306]

Segawa TF, Bodenhausen G. Determination of transverse relaxation rates in systems with scalar-coupled spins: The role of antiphase coherences. Journal of magnetic resonance (San Diego, Calif.: 1997) 2014-07-21 [PMID: 24188922]

Dufour T. From Basics to Frontiers: A Comprehensive Review of Plasma-Modified and Plasma-Synthesized Polymer Films. Polymers 2023-08-30 [PMID: 37688233]

Satake T Epstein-Barr virus-based plasmid enables inheritable transgene expression in mouse cerebral cortex PLOS ONE 2021-09-30 [PMID: 34591902]

Schmitt C, Lechanteur A, Cossais F et al. Liposomal Encapsulated Curcumin Effectively Attenuates Neuroinflammatory and Reactive Astrogliosis Reactions in Glia Cells and Organotypic Brain Slices International Journal of Nanomedicine 2020-05-25 [PMID: 32547020]

Chang SY, Kim E, Carpena NT et al. Photobiomodulation Can Enhance Stem Cell Viability in Cochlea with Auditory Neuropathy but Does Not Restore Hearing Stem cells international 2023-11-15 [PMID: 38020205] (Immunohistochemistry)

Tan R, Hu X, Wang X et al. Leptin Promotes the Proliferation and Neuronal Differentiation of Neural Stem Cells through the Cooperative Action of MAPK/ERK1/2, JAK2/STAT3 and PI3K/AKT Signaling Pathways International journal of molecular sciences 2023-10-13 [PMID: 37894835] (ICC/IF, Rat)

Huang LY, Ma JY, Song JX et al. Ischemic accumulation of succinate induces Cdc42 succinylation and inhibits neural stem cell proliferation after cerebral ischemia/reperfusion Neural regeneration research 2023-05-01 [PMID: 36254990] (ICC/IF, Mouse)

Chen L, Wang J, Yang T et al. Establishment of iPS cell line (KLRMMEi003-A) from a patient with Usher syndrome due to USH2A mutation Stem cell research 2023-02-28 [PMID: 36863132] (ICC/IF, Human)

#### Details:

Dilution used in ICC/IF 1:200

Liang L, Xue Y, Su C et al. Establishment of iPS cell line (KLRMMEi002-A) by reprogramming peripheral blood mononuclear cells from a patient with USH2A-associated Usher syndrome Stem Cell Res 2022-02-13 [PMID: 35152177]

More publications at <a href="http://www.novusbio.com/NBP1-92717">http://www.novusbio.com/NBP1-92717</a>





# **Novus Biologicals USA**

10730 E. Briarwood Avenue Centennial, CO 80112

USA

Phone: 303.730.1950 Toll Free: 1.888.506.6887

Fax: 303.730.1966

nb-customerservice@bio-techne.com

#### **Bio-Techne Canada**

21 Canmotor Ave Toronto, ON M8Z 4E6

Canada

Phone: 905.827.6400 Toll Free: 855.668.8722 Fax: 905.827.6402

canada.inquires@bio-techne.com

### **Bio-Techne Ltd**

19 Barton Lane Abingdon Science Park Abingdon, OX14 3NB, United Kingdom Phone: (44) (0) 1235 529449

Free Phone: 0800 37 34 15 Fax: (44) (0) 1235 533420 info.EMEA@bio-techne.com

#### **General Contact Information**

www.novusbio.com

Technical Support: nb-technical@bio-

techne.com

Orders: nb-customerservice@bio-techne.com

General: novus@novusbio.com

# **Products Related to NBP1-92717**

HAF007 Goat anti-Mouse IgG Secondary Antibody [HRP]

NB720-B Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]

NBP1-97005-0.5mg Mouse IgG1 Isotype Control (MG1)
NBP2-48575PEP Nestin Recombinant Protein Antigen

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