

Alexa Fluor[®] 594 anti-Nestin Antibody

Catalog# / Size	656804 / 100 µg
Clone	10C2
Regulatory Status	RUO
Other Names	NES
Isotype	Mouse IgG1, κ
Description	Nestin is a class VI intermediate filament protein originally found in neuronal stem cells, and is required for survival and renewal of neural progenitor cells. In mixtures, Nestin forms heterodimers with vimentin or internexin, participating in the remodeling of the cell. Nestin was found to be expressed on vascular endothelial progenitor cells and various neoplasms. It is proposed to be a novel angiogenesis marker and cancer therapeutic target.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Fusion protein
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor [®] 594 under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	ICC - Quality tested IHC-P - Verified
Recommended Usage	<p>Each lot of this antibody is quality control tested by immunocytochemistry. For immunocytochemistry, a concentration range of 1.0 - 5.0 µg/ml is recommended. For immunohistochemistry, a concentration range of 5.0 - 10 µg/ml is suggested. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Alexa Fluor[®] 594 has an excitation maximum of 590 nm, and a maximum emission of 617 nm.</p> <p>Alexa Fluor[®] and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p>View full statement regarding label licenses</p>
Application Notes	Additional reported applications (for the relevant formats) include: immunohistochemistry ¹ .
Application References	1. Jozef S, <i>et al.</i> 2012. <i>Biomed. Pap. Med. Fac.</i> 156:135. (IHC)
(PubMed link indicates BioLegend citation)	
RRID	AB_2563509 (BioLegend Cat. No. 656804)

Antigen Details

Structure	1621 amino acids with predicted molecular weight of 200-220 kD
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Distribution	Cytosol
Function	Required for survival and renewal of neural progenitor cells; plays roles in angiogenesis and tumor formation
Interaction	Vimentin, alpha-internexin and FHOD3
Cell Type	Neural Stem Cells
Biology Area	Angiogenesis, Cell Biology, Cell Motility/Cytoskeleton/Structure, Immunology, Neuroscience, Neuroscience Cell Markers, Stem Cells
Molecular Family	Intermediate Filaments
Antigen References	<ol style="list-style-type: none"> 1. Matsuda Y, <i>et al.</i> 2013. <i>World J. Gastroenterol.</i> 19:42. 2. Matsuda Y, <i>et al.</i> 2012. <i>Med. Mol. Morphol.</i> 45:59. 3. Krupkova O Jr, <i>et al.</i> 2010. <i>Neoplasma.</i> 57:291. 4. Hombach-Klonisch S, <i>et al.</i> 2008. <i>Arch. Immunol. Ther. Exp. (Warsz).</i> 56:165. 5. Pilkington GJ, <i>et al.</i> 2005. <i>Cell Prolif.</i> 38:423.
Gene ID	10763

Related Protocols

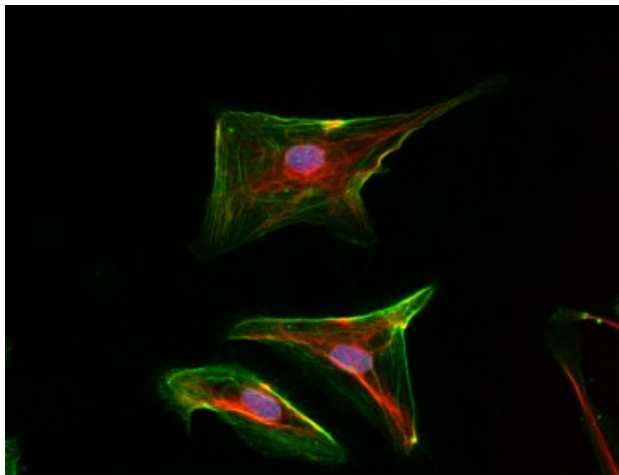
[Immunocytochemistry Staining Protocol](#)

[Immunohistochemistry Protocol for Paraffin-Embedded Sections](#)

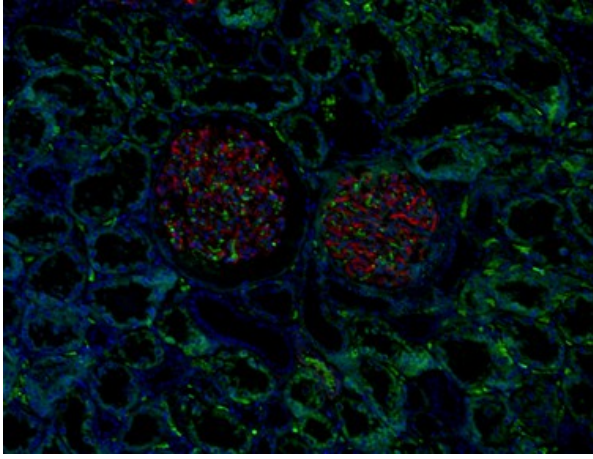
Other Formats

Purified anti-Nestin, Alexa Fluor® 594 anti-Nestin, Brilliant Violet 421™ anti-Nestin, PE anti-Nestin, Alexa Fluor® 647 anti-Nestin, Direct-Blot™ HRP anti-Nestin, Alexa Fluor® 488 anti-Nestin

Product Data



HUVEC cells were fixed with 1% paraformaldehyde (PFA), permeabilized with 0.5% Triton X-100, and blocked with 5% fetal bovine serum for 30 minutes at room temperature. Then the cells were stained with 5 µg/ml of anti-human Nestin (clone 10C2) Alexa Fluor® 594 overnight, followed by Alexa Fluor® 488 Phalloidin (green) staining for 20 minutes at 4°C. Nuclei were counterstained with DAPI (blue). The image was captured with 40X objective.



Human paraffin-embedded kidney tissue slices were prepared with a standard protocol of deparaffination and rehydration. Antigen retrieval was done with Tris-Buffered Saline 20X (1.0M, pH7.4) at 95°C for 40 minutes. Tissue was washed with PBS/0.05% Tween20 twice for five minutes, permeabilized with 0.5% Triton-X 100 for ten minutes and blocked with 5% FBS and 0.2% Gelatin for 30 minutes. Then, the tissue was stained with 5 µg/ml of purified anti-human CD133 (clone7) at 4°C overnight. On the next day, tissue was washed with PBS twice

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