

## Direct-Blot™ HRP anti-Nestin Antibody

<b>Catalog# / Size</b>	656811 / 100 µL
<b>Clone</b>	10C2
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	NES
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	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

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<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Fusion protein
<b>Formulation</b>	This antibody is provided in 50% glycerol in aqueous buffered solutions with preservatives.
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with HRP under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<b>Storage &amp; Handling</b>	Upon receipt, the antibody solution should be stored undiluted at -20°C, and protected from prolonged exposure to light.
<b>Application</b>	<a href="#">WB - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">Western blotting</a> . For Western blotting, the suggested dilution is 1:1000. The optimal dilution should be determined by titration for each individual assay of interest.  25 µl and 100 µl of Direct-Blot™ HRP antibody can be used for approximately 5 and 20 Western blots, respectively, at the recommended concentration/dilution.
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: immunohistochemistry <sup>1</sup> .
<b>Application References</b> (PubMed link indicates BioLegend citation)	1. Jozef S, <i>et al.</i> 2012. <i>Biomed. Pap. Med. Fac.</i> 156:135. (IHC)
<b>RRID</b>	AB_2616991 (BioLegend Cat. No. 656811)

### Antigen Details

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<b>Structure</b>	1621 amino acids with predicted molecular weight of 177 kD. The observed molecular weight is larger than 250 kD.
<b>Distribution</b>	Cytosol
<b>Function</b>	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**

1. Matsuda Y, et al. 2013. *World J. Gastroenterol.* 19:42.
2. Matsuda Y, et al. 2012. *Med. Mol. Morphol.* 45:59.
3. Krupkova O Jr, et al. 2010. *Neoplasma.* 57:291.
4. Hombach-Klonisch S, et al. 2008. *Arch. Immunol. Ther. Exp. (Warsz).* 56:165.
5. Pilkington GJ, et al. 2005. *Cell Prolif.* 38:423.

**Gene ID**

[10763](#)

**Related Protocols**

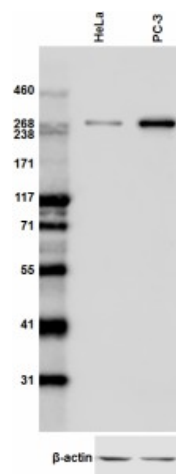
[Direct-Blot™ HRP Antibodies Save You Time - Video](#)

[Direct-Blot™ Western Blotting Protocol](#)

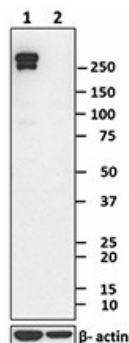
**Other Formats**

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**



Total lysates (15 µg protein) from HeLa (low expression, negative control) and PC-3 (positive control) cells were resolved by electrophoresis (4-20% Tris-glycine gel), transferred to nitrocellulose, and probed with 1:1000 Direct-Blot™ HRP anti-Nestin antibody, clone 10C2. Direct-Blot™ HRP anti-β-actin antibody was used as a loading control (Cat. No. 643807, 1:8000 dilution).



Total cell lysate from NTERA-2 cells (lane 1, 15 µg) and NF-1 cells (lane 2, 15 µg) were resolved by electrophoresis (4-20% Tris-Glycine gel), transferred to nitrocellulose, and probed with Direct-Blot™ HRP anti-Nestin antibody (clone 10C2). Proteins were visualized with chemiluminescence detection. Direct-Blot™ HRP anti-β-actin antibody (clone 2F1-1) was used as a loading control.

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BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587