

## ARG22881 anti-Nestin antibody [Rat-401 (4D4)]

Package: 50 µg

Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [Rat-401 (4D4)] recognizes Nestin Mouse anti Rat Nestin antibody, clone Rat-401 recognizes rat nestin, a large intermediate filament protein transiently expressed in embryonic glial cells (Hockfield and McKay 1985). It is predominately expressed in stem cells of the developing nervous system. Terminal differentiation is associated with a loss of nestin expression. Nestin expression has also been noted in other embryonic tissues, also in most Glioblastoma multiformes and many melanomas.
Tested Reactivity	Ms, Rat
Species Does Not React With	Hu
Tested Application	ICC/IF, IHC-Fr, IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Clone	Rat-401 (4D4)
Isotype	IgG1
Target Name	Nestin
Species	Rat
Immunogen	Nestin purified from embryonic Rat spinal cord.
Conjugation	Un-conjugated
Alternate Names	NES; Nestin FLJ21841; Nbla00170

### Application Instructions

Application table	Application	Dilution
	ICC/IF	Assay-dependent
	IHC-Fr	1:20 - 1:200
	IHC-P	1:20 - 1:200
	WB	Assay-dependent

Application Note	<p>IHC: We recommend perfusing tissues with 4% paraformaldehyde at pH 7.4 for light microscopy or with either 4% paraformaldehyde at pH 10.0 or 4% paraformaldehyde with 0.1% glutaraldehyde at pH 7.4 for EM. For Immunocytochemistry we recommend using cells fixed in 4% paraformaldehyde buffered with 50 mM sodium borate at pH 9.5.</p> <p>WB: Mouse anti Rat Nestin antibody, clone Rat-401 reacts with a band at 200-220 kDa in reducing gels of newborn rat or mouse cell extracts. For western blotting it is recommended that samples should be boiled in 4 volumes of 125 mM Tris, pH 6.8, 10% 2-mercaptoethanol, 10% glycerol and 4.6% SDS. Membranes should be blocked with milk or BSA. 5% PAGE gels are suggested.</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p>
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## Properties

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Form	Liquid
Purification	Unpurified.
Buffer	Tris-buffered saline and 0.09% Sodium azide
Preservative	0.09% Sodium azide
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

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Gene Symbol	NES
Gene Full Name	Nestin
Background	This gene encodes a member of the intermediate filament protein family and is expressed primarily in nerve cells.
Function	Required for brain and eye development. Promotes the disassembly of phosphorylated vimentin intermediate filaments (IF) during mitosis and may play a role in the trafficking and distribution of IF proteins and other cellular factors to daughter cells during progenitor cell division. Required for survival, renewal and mitogen-stimulated proliferation of neural progenitor cells.
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Controls and Markers antibody; Developmental Biology antibody; Neuroscience antibody; NSC antibody; Neural Stem Cell Marker antibody; NSC and Neuron Marker antibody; Neuron Development Study antibody
Calculated Mw	177 kDa
PTM	Acetylation, Isopeptide bond, Phosphoprotein, Ubl conjugation
Cellular Localization	Intermediate filament