

**MOUSE ANTI-NESTIN
MONOCLONAL ANTIBODY**

CATALOG NUMBER:	MAB353	QUANTITY:	100 µg
LOT NUMBER:		CONCENTRATION:	1.02 mg/mL
CLONE NAME:	Rat-401	HOST/ISOTYPE:	Ms IgG ₁
BACKGROUND:	Nestin, a large intermediate filament protein (class Type VI) expressed during development and in myotendinous and neuromuscular junctions. Nestin expression is restricted, typically disappearing by E18. Nestin is thought to be a reasonable neuronal marker; however, recent studies have found nestin expression in other cell types such as endothelial cells (Mokry and Nemecek, 1998). Nestin identifies the most primitive neuroepithelium but also identifies many other embryonic tissues, so it is not specific for CNS. Nestin expression is seen in almost all GBMs (Glioblastoma multiformes) and many melanomas (both primary and metastatic) but not in any metastatic carcinomas.		
SPECIFICITY:	Rodent Nestin protein confirmed with rat and mouse. Rat-401 is not reactive with human nestin protein.		
APPLICATIONS:	<p><u>Immunohistochemistry:</u> 1:20-1:200. Perfuse tissue 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. Suitable for frozen or paraffin-embedded sections.</p> <p><u>Immunocytochemistry:</u> 1:20-1:200. Fix cells in 4% paraformaldehyde buffered with 50 mM sodium borate at pH 9.5.</p> <p><u>Immunoblot:</u> 200-220 kDa in reducing gels of newborn rat or mouse cell extracts. Note that nestin was originally reported (erroneously) to migrate at approximately 440 kDa by SDS-PAGE (Kachinsky, 1995). For Westerns, prepare samples by boiling in 4 volumes of 125mM Tris, pH 6.8, 10% 2-mercaptoethanol, 10% glycerol and 4.6% SDS. 5% PAGE gels are suggested. Block membranes with milk or BSA. Do not dilute primary antibody in buffer containing milk. Freezing and thawing of samples or samples not stored at -85°C will show breakdown of nestin sometimes into multiple fragments.</p> <p><i>Optimal working dilutions and protocols must be determined by end user.</i></p>		
SPECIES REACTIVITY:	Reacts with Mouse and Rat. Does not react with Human. Reactivity with other species has not been determined.		
IMMUNOGEN:	Nestin purified from embryonic rat spinal cord.		
PRESENTATION:	Purified immunoglobulin. Liquid in buffer containing 0.09% sodium azide.		
STORAGE/HANDLING:	Maintain at 2-8°C in undiluted aliquots for up to six months after date of receipt.		
REFERENCES:	Gelain, F., et al., <i>PLoS ONE</i> (2006) 1:e119. Palazuelos, J., et al., <i>The FASEB Journal</i> (2006) published on line October 2, 2006, E1-		

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Important Note: *During shipment, small volumes of product will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 μ L or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.*

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