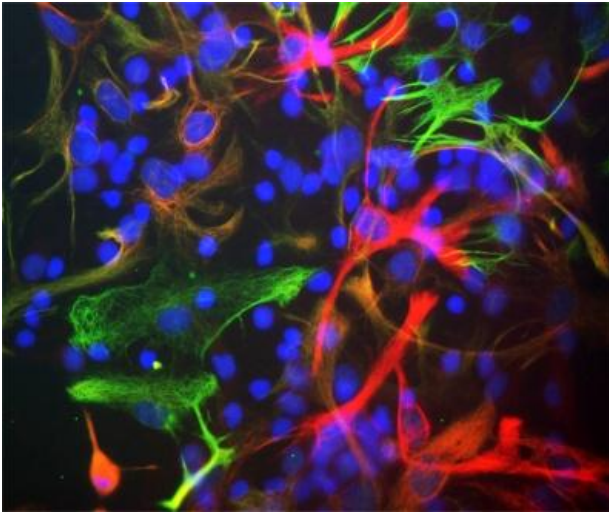
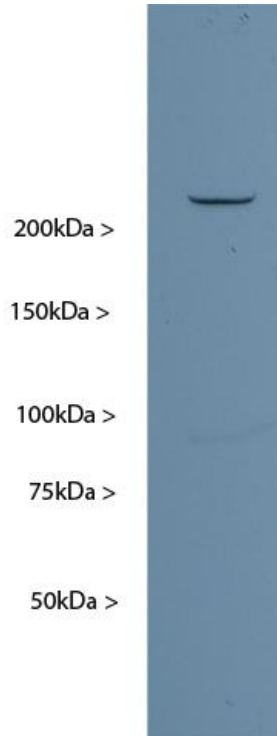


Product name:	Nestin Mouse Monoclonal Antibody
Cat number:	MAB-11004
Conjugate:	Unconjugated
Size:	100 ug
Clone:	Rat-401
Concentration:	1mg/ml
Host:	Ms
Isotype:	IgG1
Immunogen:	Nestin purified from embryonic rat spinal cord.
Reactivity:	Mouse, Rat
Applications:	Western Blot: 1:2,500 Immunocytochemistry: 1:250 Immunohistochemistry: 1:250, IF
Molecular Weight:	~240kDa
Purification:	Purified
Form:	Liquid
Buffer:	0.09% sodium azide
Storage:	Store liquid antibody at -20° C for long term storage, and refrigerated at 2-8°C for shorter term.
Background:	The initial challenge was performed with a preparation of a segment of recombinant human Nestin expressed in bacteria and highly purified. The specific region was amino acids 317 to 630 of the human protein. This is a region which is 55% identical to rat Nestin and 57% identical to mouse Nestin.



Mixed cultures of neonatal rat neurons and glia stained with Rat-401 (red), chicken antibody to vimentin (green) and DNA (DAPI stain, blue). Astrocytes and neuronal stem cells stain strongly and specifically in a clearly filamentous fashion with the MAB-11004 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. The presence of nestin indicates that the cells are developing astrocytes, neuroblasts or undifferentiated neural stem cells



Western blot of developing rat brain (P18) homogenate probed with Rat. A single strong band running at ~240 kDa is seen