ARG30009
NSC and Neuron Marker Antibody Duo (Nestin, MAP2)

Package: 1 pair
Store at: -20°C

Component

Cat. No.	Component Name	Host clonality	Reactivity	Application	Package
ARG52328	anti-MAP2 antibody	Chicken pAb	Bov, Dog, Hu, Marmoset, Ms, Rat, Sheep	ICC/IF, IHC-P, IHC-Fr, IHC-FoFr , WB	50 µl
ARG52345	anti-Nestin antibody [4D11]	Mouse mAb	Hu, Ms, Rat	ICC/IF, IHC-P, WB	50 µl

Summary

Product Description

Nestin is an intermediate filament protein expressed in dividing cells during the early development stages of nervous system and is utilized as a neural stem cell marker. The neural stem cells loss Nestin expression once the cell fate is determined. Following neuro- and gliogenesis, Nestin is replaced by cell type-specific intermediate filaments, e.g., Neurofilaments for neurons and GFAP for astrocytes.

MAP2 is a neuron-specific cytoskeletal protein that enriches and stabilizes in dendrites and is used as a mature neuron marker.

arigo's ARG30009 NSC and Neuron Marker Antibody Duo (Nestin, MAP2) is excellent for distinguishing neural stem cells and mature neurons.

Related news:
14-3-3η as a promising target for the treatment of Major Depression Disorder
Neuronal Development Marker
Astrocyte-to-neuron conversion for Parkinson's disease treatment

Target Name

NSC and Neuron Marker

Alternate Names

NSC and Neuron Marker antibody; MAP2 antibody; Nestin antibody

Properties

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

Gene Full Name

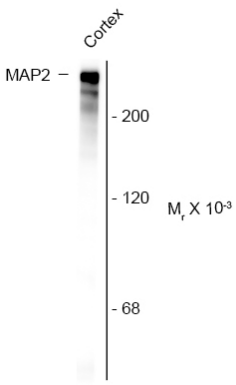
Antibody Duo for NSC and Neuron Marker (Nestin, MAP2)

Highlight

Related Product:
anti-MAP2 antibody;
anti-Nestin antibody;

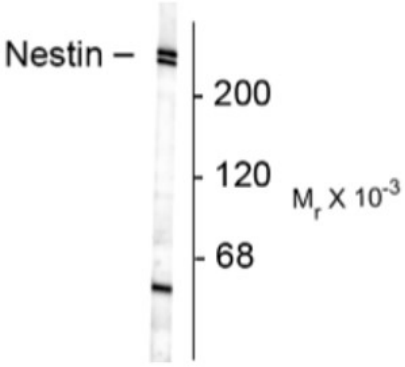
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Controls and Markers antibody; Developmental Biology antibody; Neuroscience antibody; Signaling Transduction antibody

Images



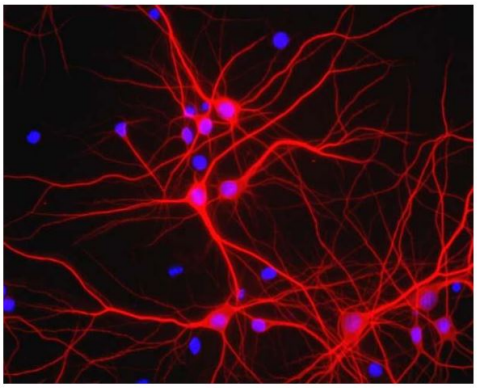
ARG52328 anti-MAP2 antibody WB image

Western Blot: rat cortex lysate stained with ARG52328 anti-MAP2 antibody showing specific immunolabeling of the ~280k MAP2 protein.



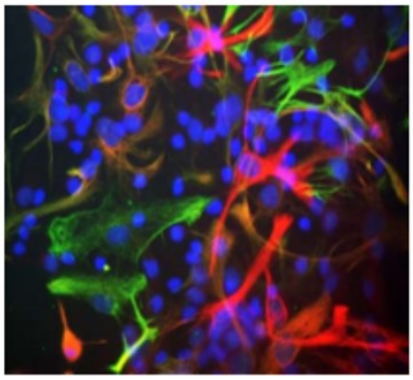
ARG52345 anti-Nestin antibody [4D11] WB image

Western Blot: neonatal rat brain lysate stained with Nestin antibody (ARG52345) showing specific immunolabeling of the ~220-240 kDa nestin doublet.



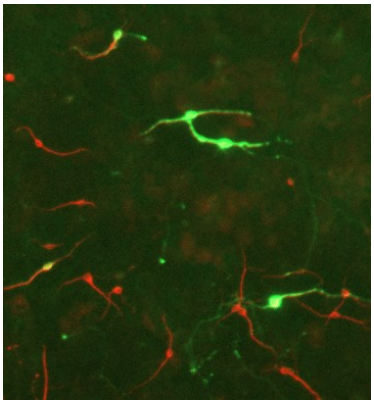
ARG52328 anti-MAP2 antibody ICC/IF image

Immunofluorescence: Mixed neuron/glial cultures. The perikarya and dendrites of neurons are strongly and specifically stained with ARG52328 anti-MAP2 antibody (red). Cell nuclei are visualized with DAPI DNA stain.



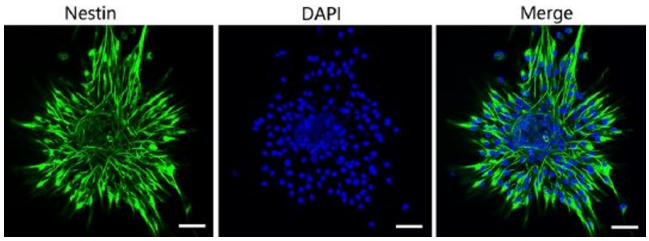
ARG52345 anti-Nestin antibody [4D11] ICC/IF image

Immunofluorescence: cultured neonatal rat neurons and glia showing nestin labeling in red (ARG52345 Nestin antibody [4D11]) and vimentin (ARG52468 anti-Vimentin antibody) in green. Astrocytes and neuronal stem cells stain strongly and specifically in a clearly filamentous fashion with the anti-Nestin antibody. The presence of Nestin indicates that the cells are developing astrocytes, neuroblasts or undifferentiated neural stem cells.



ARG52328 anti-MAP2 antibody ICC/IF image

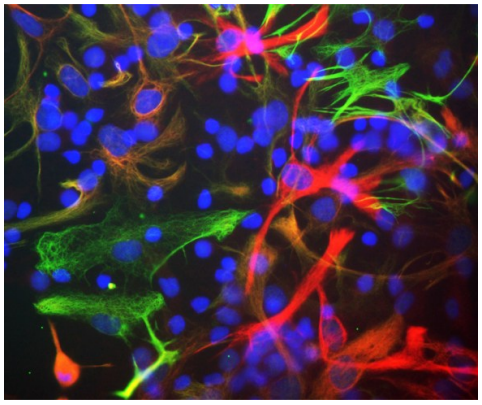
Immunofluorescence: E17 Rat midbrain mixed neuronal cultures stained with ARG52461 anti-Tyrosine Hydroxylase antibody (green) and ARG52328 anti-MAP2 antibody (red).



ARG52345 anti-Nestin antibody [4D11] ICC/IF image

Immunofluorescence: Human hippocampal neural stem cells stained with ARG52345 anti-Nestin antibody [4D11].

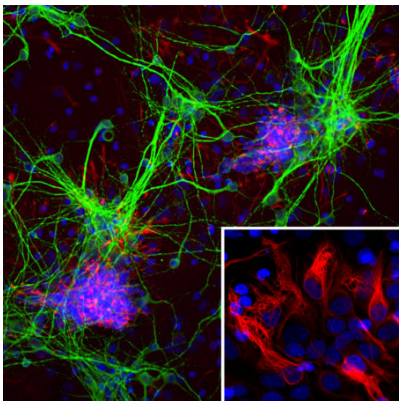
From Yang Y et al. Hum Exp Toxicol- (2021), doi: 10.1177/09603271211045959, Fig. 3.



ARG52345 anti-Nestin antibody [4D11] ICC/IF image

Immunofluorescence: Cultured neonatal Rat neurons and glia showing nestin labeling in red (ARG52345 Nestin antibody [4D11]) and vimentin (ARG52468 anti-Vimentin antibody) in green.

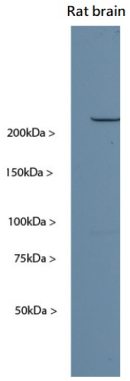
Astrocytes and neuronal stem cells stain strongly and specifically in a clearly filamentous fashion with the anti-Nestin antibody. The presence of Nestin indicates that the cells are developing astrocytes, neuroblasts or undifferentiated neural stem cells.



ARG52345 anti-Nestin antibody [4D11] ICC/IF image

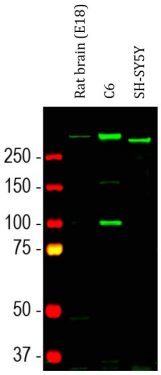
Immunofluorescence: Cortical neuron-glial cells from E20 Rat stained with ARG52345 anti-Nestin antibody [4D11] (red) at 1:500 dilution and costained with ARG52328 anti-MAP2 antibody (green) at 1:5000 dilution. Hoechst (blue) for nuclear staining.

The Nestin antibody labels developing astrocytes and neuronal stem cells in a clearly filamentous fashion, while the MAP2 antibody stains dendrites and perikarya of mature neurons.



ARG52345 anti-Nestin antibody [4D11] WB image

Western blot: Rat brain (P18) homogenate stained with ARG52345 anti-Nestin antibody [4D11].



ARG52345 anti-Nestin antibody [4D11] WB image

Western blot: Rat brain (embryonic, E18), C6 and SH-SY5Y cell lysates stained with ARG52345 anti-Nestin antibody [4D11] (green) at 1:500 dilution.