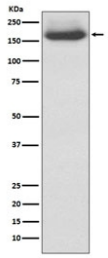
NF-M Antibody / Neurofilament Medium Chain Antibody [clone AAGI-14] (RQ5169)

Catalog No.	Formulation	Size
RQ5169	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

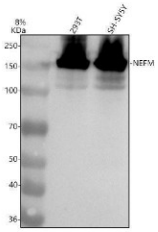
Recombinant RABBIT MONOCLONAL

Bulk quote request

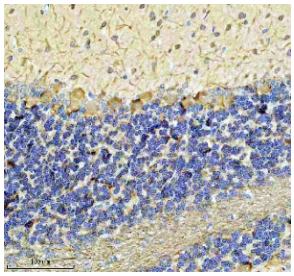
Availability	1-2 weeks
Species Reactivity	Human, Rat, Pig
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	AAGI-14
Purity	Affinity purified
UniProt	P07197
Applications	Western Blot : 1:500-1:2000 Immunohistochemistry (FFPE) : 1:50-1:200
Limitations	This NF-M Antibody / Neurofilament Medium Chain Antibody is available for research use only.



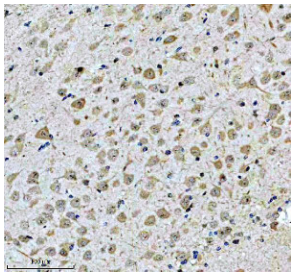
NF-M Antibody Human 293T Cell WB. Western blot testing of human 293T cell lysate using NF-M Antibody, clone AAGI-14. A prominent band is detected at approximately 145-160 kDa, consistent with the characteristic migration of heavily phosphorylated neurofilament medium chain, despite a predicted molecular weight of approximately 102 kDa. The slower electrophoretic mobility reflects extensive post-translational phosphorylation, a well-established feature of NF-M. These results demonstrate that NF-M Antibody, a Neurofilament Medium Chain Antibody, specifically detects endogenous NF-M in human cells.



NF-M Antibody Human 293T and SH-SY5Y WB. Western blot analysis of human 293T and SH-SY5Y cell lysates using NF-M Antibody. Lane 1: 293T whole cell lysate. Lane 2: SH-SY5Y whole cell lysate. Samples (30 ug/lane) were separated on an 8% SDS-PAGE gel under reducing conditions, transferred to a nitrocellulose membrane, and detected with NF-M Antibody followed by an HRP-conjugated secondary antibody and ECL detection. A strong band is observed at approximately 160 kDa, migrating above the predicted molecular weight of approximately 102 kDa due to the extensive phosphorylation characteristic of neurofilament medium chain. These results demonstrate that NF-M Antibody, a Neurofilament Medium Chain Antibody, specifically detects endogenous NEFM in human cells.



NF-M Antibody Rat Cerebellum IHC. Immunohistochemical analysis of FFPE rat cerebellum tissue using NF-M Antibody. Heat-induced epitope retrieval was performed in pH 8.0 EDTA buffer prior to incubation with the primary antibody overnight at 4Â°C. An HRP-conjugated goat anti-rabbit secondary antibody with DAB chromogen was used for visualization. Distinct cytoplasmic and neurite staining is observed in cerebellar neurons, with prominent immunoreactivity within the Purkinje cell layer and neuronal processes, consistent with the expected distribution of neurofilament medium chain. These results demonstrate that NF-M Antibody, a Neurofilament Medium Chain Antibody, specifically detects endogenous NEFM in FFPE rat nervous tissue.



NF-M Antibody Pig Brain IHC. Immunohistochemical analysis of FFPE pig brain tissue using NF-M Antibody. Heat-induced epitope retrieval was performed in pH 8.0 EDTA buffer prior to incubation with the primary antibody overnight at 4Â°C. An HRP-conjugated goat anti-rabbit secondary antibody with DAB chromogen was used for visualization. Moderate cytoplasmic staining is observed in neurons throughout the brain tissue, consistent with the expected expression pattern of neurofilament medium chain within the neuronal cytoskeleton. These results demonstrate that NF-M Antibody, a Neurofilament Medium Chain Antibody, specifically detects endogenous NEFM in FFPE porcine nervous tissue.

Description

NF-M Antibody recognizes neurofilament medium chain, an intermediate filament protein encoded by the NEFM gene that forms a major structural component of the neuronal cytoskeleton. Neurofilament medium chain assembles with neurofilament light and neurofilament heavy chains to generate the neurofilament network that provides mechanical strength and maintains axonal diameter throughout the central and peripheral nervous systems. These filaments are essential for preserving neuronal architecture and supporting efficient axonal transport. Because of its abundant and neuron-specific expression, NF-M Antibody is widely used to identify neurons, evaluate axonal integrity, and investigate nervous system development and disease.

Neurofilament medium chain undergoes extensive post-translational modification, including phosphorylation, which influences filament assembly, stability, and interactions with other cytoskeletal proteins. Proper regulation of neurofilament organization is required for normal axonal growth, intracellular transport, and maintenance of long neuronal processes. Disruption of neurofilament dynamics has been associated with axonal injury, neurodegeneration, traumatic brain injury, and disorders affecting both the central and peripheral nervous systems. As a result, NF-M Antibody serves as a valuable research tool for studies examining neuronal morphology, axonal remodeling, cytoskeletal organization, and mechanisms of neuronal degeneration.

Changes in neurofilament expression and distribution have been documented in numerous neurological diseases, including amyotrophic lateral sclerosis, Alzheimer's disease, Parkinson's disease, multiple sclerosis, and various peripheral neuropathies. Neurofilament proteins are also widely studied as biomarkers of neuronal injury because their release accompanies axonal damage. In addition, neurofilament medium chain expression is routinely evaluated in

neuroscience research, developmental neurobiology, neuropathology, and studies of neural regeneration. A well-characterized Neurofilament Medium Chain Antibody supports applications including Western blotting, immunohistochemistry, immunofluorescence, and other protein expression analyses that investigate neuronal identity, axonal structure, and cytoskeletal integrity.

NSJ Bioreagents offers NF-M Antibody, clone AAGI-14, a recombinant rabbit monoclonal antibody developed to provide consistent, specific detection of neurofilament medium chain in research applications. This Neurofilament Medium Chain Antibody is well suited for studies of neuronal development, axonal biology, neurodegenerative disease, nervous system injury, and intermediate filament organization.

For researchers seeking additional antibodies against this important neuronal cytoskeletal protein, including products validated with complementary applications and formats, visit our NEFM Antibody page.

Application Notes

Optimal dilution of the NF-M Antibody / Neurofilament Medium Chain Antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human NEFM / Neurofilament Medium was used as the immunogen for the NF-M antibody.

Storage

Store the NF-M antibody at -20oC.

Alternate Names

NF-M antibody, Neurofilament Medium Chain antibody, Neurofilament M antibody, NEFM antibody, 160 kDa Neurofilament antibody

Copyright © NSJ Bioreagents. All rights reserved.