

ARG30011 Neurofilament Antibody Duo (NF-H, NF-L)

Package: 1 pair
Store at: -20°C

Component

Cat. No.	Component Name	Host clonality	Reactivity	Application	Package
ARG63075	anti-Neurofilament NF-H antibody [NF-01]	Mouse mAb	Hu, Ms, Rat, Mamm	ICC/IF, IHC-P, WB	50 µg
ARG52348	anti-Neurofilament NF-L antibody [DA2]	Mouse mAb	Hu, Ms, Rat	FACS, ICC/IF, IHC-Fr, IHC-P, WB	50 µl

Summary

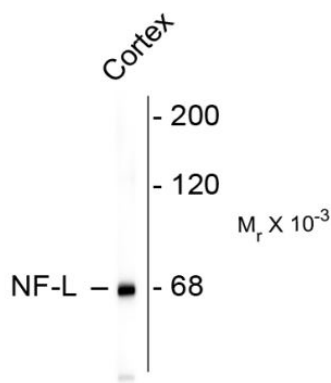
Product Description	Neurofilaments (NF) are intermediate filaments with a diameter of 10 nm found in neurons. They are a major component of the neuronal cytoskeleton, and are believed to function primarily to provide structural support for the axon and to regulate axon diameter. The three major neurofilament subunits (NF-L, NF-M and NF-H) were discovered from studies of axonal transport. Proteins are synthesized within the cell body, and hence they must travel along the axon to reach their final destination. The names given to the three major neurofilament subunits are based upon the apparent M.W. of the mammalian subunits on SDS-PAGE: NF-L, the light or lowest runs at 68-70 kDa, forms the back-bone of the Nf heteropolymer and can self-assemble. Mutations in the NfL gene have been associated with Charcot-Marie Tooth disease NF-M, the medium or middle runs at about 145-160 kDa, is important for the radial axonal growth. One mutation in the NfM gene has been associated with Parkinsons disease. NF-H, the heavy or highest runs at 200-220 kDa, is important for protein-protein interaction which is regulated locally in the axon by phosphorylation. Mutations in the NfH gene have been associated with Amyotrophic lateral sclerosis (ALS) [Reviewed by Axel Petzold] ARG30011 Neurofilament Duos (NF-H, NF-L), including antibodies react two of the neurofilament, NF-H and NF-L, could be used as markers for differentiated neuron or in neuronal disease study.
Target Name	Neurofilament
Alternate Names	Neurofilament antibody; Neurofilament NF-L antibody; Neurofilament NF-H 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.

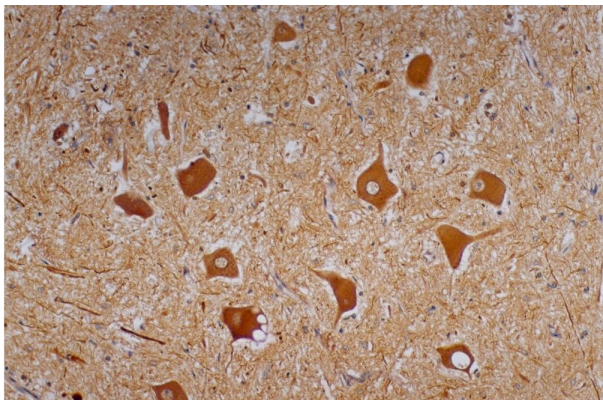
Bioinformation

Gene Full Name	Antibody Duo for Neurofilament (NF-H, NF-L)
Research Area	Controls and Markers antibody; Developmental Biology antibody; Neuroscience antibody; Signaling Transduction antibody



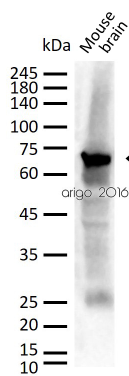
ARG52348 anti-Neurofilament NF-L antibody [DA2] WB image

Western blot: rat cortex lysate stained with ARG52348 anti-Neurofilament NF-L antibody [DA2] showing specific immunolableing of the ~ 68k NF-L protein.



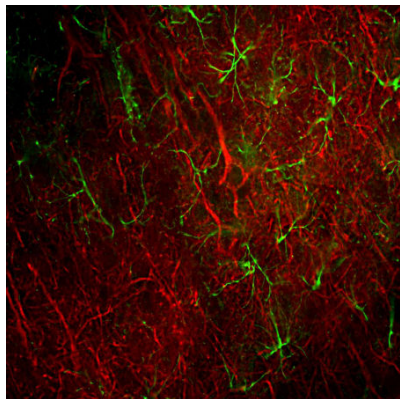
Monoclonal antibody clone NF-01 IHC-P image

Immunohistochemistry: Human cerebellum (paraffin-embedded sections) stained with antibody clone NF-01



ARG52348 anti-Neurofilament NF-L antibody [DA2] WB image

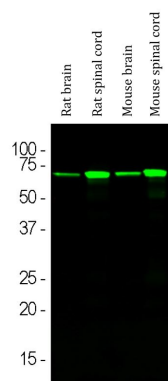
Western blot: 30 μ g of Mouse brain lysate stained with ARG52348 anti-Neurofilament NF-L antibody [DA2] at 1:1000 dilution.



ARG52348 anti-Neurofilament NF-L antibody [DA2] IHC-Fr image

Immunohistochemistry: Frozen section of Rat frontal cortex tissue stained with ARG52348 anti-Neurofilament NF-L antibody [DA2] (red) at 1:500 dilution, and costained with anti-GFAP antibody (green) at 1:5000 dilution. Following transcardial perfusion of Rat with 4% paraformaldehyde, brain was post fixed for 24 hours, cut to 45 μ M, and free-floating sections were stained with above antibodies.

Clone DA2 labels cell bodies and processes of pyramidal neurons, as well as dendrites and axons of other neuronal cells, while the GFAP antibody stains the network of glial cells.



ARG52348 anti-Neurofilament NF-L antibody [DA2] WB image

Western blot: Rat brain, Rat spinal cord, Mouse brain and Mouse spinal cord lysates stained with ARG52348 anti-Neurofilament NF-L antibody [DA2] (green) at 1:5000 dilution.