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PRODUCT DATASHEET

Anti-Neurofilament light polypeptide (NF-L), DG-Sensor™ Antibody (6H63)

Product Details

Available Variants	50 µg (SKU:M-2122-50)
Conjugate	Unconjugated
Isotype	IgG1
Clone	6H63
Host Species	Mouse
Format	IgG
Physical State	Lyophilized
Buffer	Lyophilized from PBS buffer pH 7.2-7.6 with 0.1% trehalose, and sodium azide
Production Notes	Protein G purified
Applications	ELISA, ICC, IF, IHC, WB
Dilution Ranges	WB: 1:5000-1:10000 ICC: 1:5000-1:10000
Species Reactivity	Bovine, Human, Mouse, Pig, Rat
Immunogen	The antibody has been made against a proprietary recombinant construct containing amino acids of human NF-L expressed in and purified from E Coli.
Specificity	Species cross-reactivity includes human, rat, mouse, cow, and pig. These are antibodies which recognize epitopes in a small segment of the neurofilament NF-L subunit which are normally not accessible to antibodies but which became available on degeneration in natural or native conditions. Under reduced or proteinase treated tissues or Western blot, these antibodies are all specific for NF-L from a variety of species.
Storage	Spin vial briefly before opening. Reconstitute with 50 µL sterile-filtered, ultrapure water to achieve a 1 mg/mL concentration. Centrifuge to remove any insoluble material. Store lyophilized antibody at 2-8°C After reconstitution of

	lyophilized antibody, aliquot and store at -20°C for a higher stability. Avoid freeze-thaw cycles. Store at 4°C for up to one month for short term storage and frequent use.
UniProt ID	P07196 UniProt Summary: Neurofilaments usually contain three intermediate filament proteins: NEFL, NEFM, and NEFH which are involved in the maintenance of neuronal caliber. May additionally cooperate with the neuronal intermediate filament proteins PRPH and INA to form neuronal filamentous networks.
Country of Origin	United States
Shipping	25°C (ambient)
Expiration	12 months after date of receipt (unopened vial).
Usage Statement	For research use only.
NCBI Gene ID	4747

Product Images

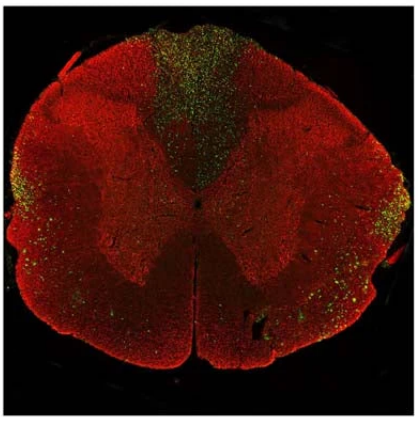


Image of a rat spinal cord coronal section with a three-day-old midline C4 contusion injury by **Immunofluorescence and Immunohistochemistry**. The section was stained with M-2122-50, Neurofilament light polypeptide (NF-L), DG-Sensor™, Clone 6H63, Mouse mAb, (green), and co-stained with product R-2113-50, Neurofilament light polypeptide, C-terminus, (NF-L-Ct), Rabbit pAb, (red). Product M-2122-50 stains prominent material aggregates in the lateral funiculi and dorsal columns, where the material is concentrated but less so elsewhere in the section. Due to the C4 lesion, these axons are deteriorating and dying. As product R-2113-50 binds to the C-terminal "tail" region of NF-L, which is absent or destroyed during degeneration, only M-2122-50 staining is observed in the degenerating neurons; positive staining for R-2113-50 in those regions is largely negative.

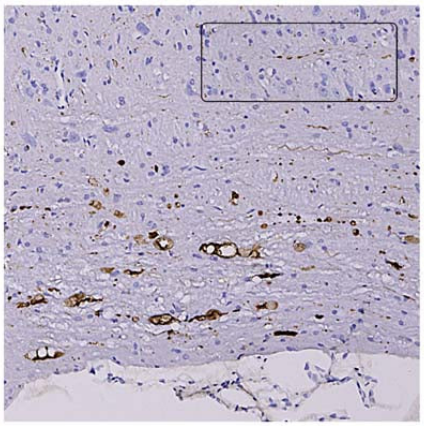
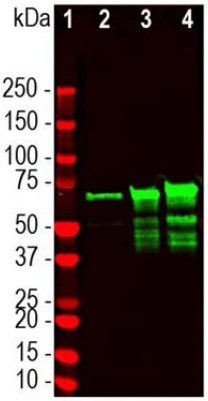


Image of formalin-fixed paraffin-embedded sections of a mouse model of ALS (Acta Neuropathol. 2016 Jan; 131(1): 103-114) by **Immunohistochemistry**. The section was stained with M-2122-50, Neurofilament light polypeptide (NF-L), DG-Sensor™, Clone 6H63, Mouse mAb. These heterozygous G85R-SOD1-YFP mice do not develop ALS unless primed with mutant SOD1 aggregates, indicating that this is a model of prion induction of pathogenesis. Degenerated processes were seen in the sciatic nerve, spinal cord fibers, and, as shown here, the brain stem, after this mouse was injected with mutant SOD1. Take note of the swollen and sinusoidal profiles. The inset depicts a beaded profile typical of degenerating processes.



Analysis by **western blot** of NF-L expression in crude CNS homogenates with M-2122-50, Neurofilament light (NF-L), DG-Sensor™ Clone 6H63, Mouse mAb, (green, 1:5,000) with a band at approx 68-70kDa. Lane 1: molecular weight standards of the specified size (red); Lane 2: E20 rat spinal cord homogenate; Lane 3: adult rat spinal cord homogenate; Lane 4: bovine spinal cord extract homogenate. Product M-2122-50 recognizes denatured forms of NF-L with apparent molecular weights of 68-70kDa when immobilized on western blot membranes. Lower molecular weight bands beneath the major band are NF-L proteolytic fragments.

Created on 19. November 2026 | All information without guarantee