

Product Name: KD-Validated NEFM Mouse Monoclonal Antibody**Catalog #: KVA00685**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 102.5kDa

Antigen Information

Gene Name	NEFM
Alternative Names	NEFM; Neurofilament Medium Chain; NF-M; NFM; NEF3; Neurofilament, Medium Polypeptide 150kDa; Neurofilament Medium Polypeptide; Neurofilament Triplet M Protein; 160 KDa Neurofilament Protein; Neurofilament 3; Neurofilament, Medium Polypeptide; Neurofilament-3 (150 KD Medium); Neurofilament Medium
Gene ID	4741.0
SwissProt ID	P07197
Immunogen	Recombinant protein of human NEFM

Background

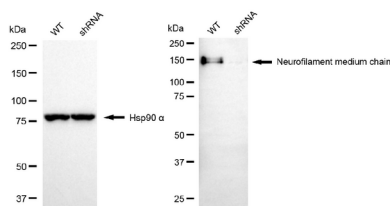
Neurofilaments are type IV intermediate filament heteropolymers composed of light, medium, and heavy chains.

Neurofilaments comprise the axoskeleton and functionally maintain neuronal caliber. They may also play a role in intracellular transport to axons and dendrites. This gene encodes the medium neurofilament protein. This protein is commonly used as a biomarker of neuronal damage. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Oct 2008]

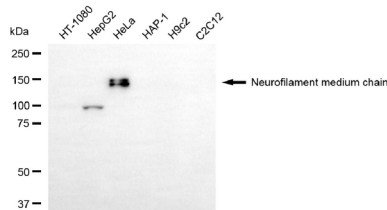
Research Area

Neuroscience, Signal Transduction, Stem Cells, Developmental Biology

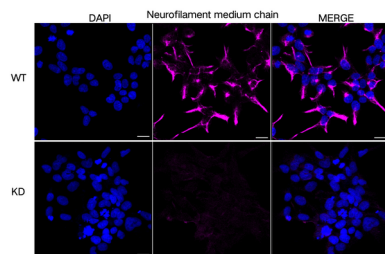
Image Data



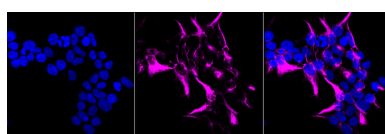
Western blotting analysis using neurofilament medium chain antibody (KVA00685). Neurofilament medium chain expression in wild type (WT) and neurofilament medium chain (NEFM) shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with neurofilament medium chain antibody (KVA00685, 1:1,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



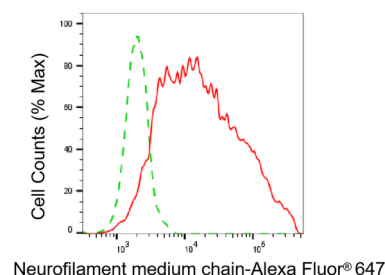
Western blotting analysis using neurofilament medium chain antibody (KVA00685). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with neurofilament medium chain antibody (KVA00685, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Immunocytochemical staining of HeLa cells using Neurofilament medium chain antibody (KVA00685, 1:1,000). Top panel: wild-type (WT); Bottom panel: Neurofilament medium chain shRNA knockdown (KD). Nuclei were stained blue with DAPI; Neurofilament medium chain was stained magenta with Alexa Fluor® 647. Scale bar, 20 μ m.



Immunocytochemical staining of HeLa cells with Neurofilament medium chain antibody (KVA00685, 1:1,000). Nuclei were stained blue with DAPI; Neurofilament medium chain was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and Smart Gain: Medium. Scale bar, 20 μ m.



Flow cytometric analysis of Neurofilament medium chain expression in HeLa cells using Neurofilament medium chain antibody (KVA00685, 1:2,000). Green, isotype control; red, Neurofilament medium chain.