10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

NEFL Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1663a

Specification

NEFL Antibody - Product Information

Application	**E, WB, IHC, IF, FC**
Primary Accession	P07196
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**62kDa KDa**

Description
Neurofilaments are type IV intermediate filament heteropolymers composed of light, medium, and heavy chains. Neurofilaments comprise the axoskeleton and they functionally maintain the neuronal caliber. They may also play a role in intracellular transport to axons and dendrites. This gene encodes the light chain neurofilament protein. Mutations in this gene cause Charcot-Marie-Tooth disease types 1F (CMT1F) and 2E (CMT2E), disorders of the peripheral nervous system that are characterized by distinct neuropathies. A pseudogene has been identified on chromosome Y.

Immunogen
Purified recombinant fragment of human NEFL expressed in E. Coli.

Formulation
Purified antibody in PBS with 0.05% sodium azide

NEFL Antibody - Additional Information

Gene ID 4747

Other Names
Neurofilament light polypeptide, NF-L, 68 kDa neurofilament protein, Neurofilament triplet L protein, NEFL, NF68, NFL

Dilution
E~~1/10000
WB~~1/500 - 1/2000
IHC~~1/200 - 1/1000
IF~~1/200 - 1/1000
FC~~1/200 - 1/400

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
NEFL Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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NEFL Antibody - Protein Information

Name NEFL

Synonyms NF68, NFL

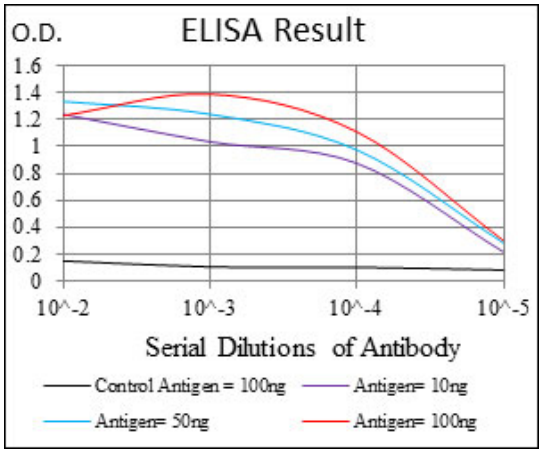
Function
Neurofilaments usually contain three intermediate filament proteins: NEFL, NEFM, and NEFH which are involved in the maintenance of neuronal caliber. May additionally cooperate with the neuronal intermediate filament proteins PRPH and INA to form neuronal filamentous networks (By similarity).

Cellular Location
Cell projection, axon {ECO:0000250|UniProtKB:P08551}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P08551}

NEFL Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



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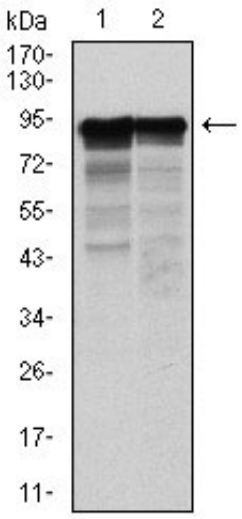


Figure 1: Western blot analysis using NEFL mouse mAb against Hela (1) and Jurkat (2) cell lysate.

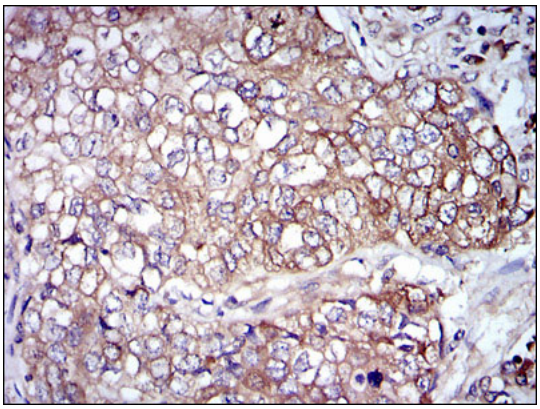


Figure 2: Immunohistochemical analysis of paraffin-embedded lung cancer tissues using NEFL mouse mAb with DAB staining.

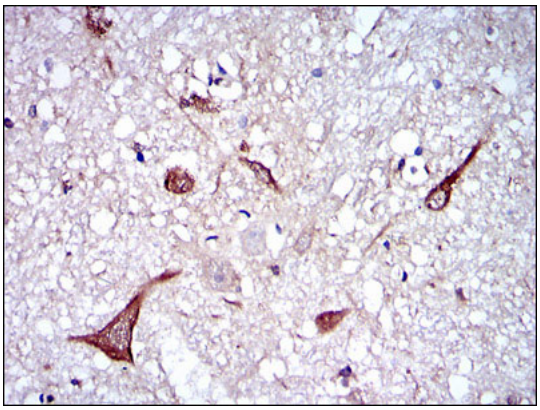


Figure 3: Immunohistochemical analysis of paraffin-embedded brain tissues using NEFL mouse mAb with DAB staining.

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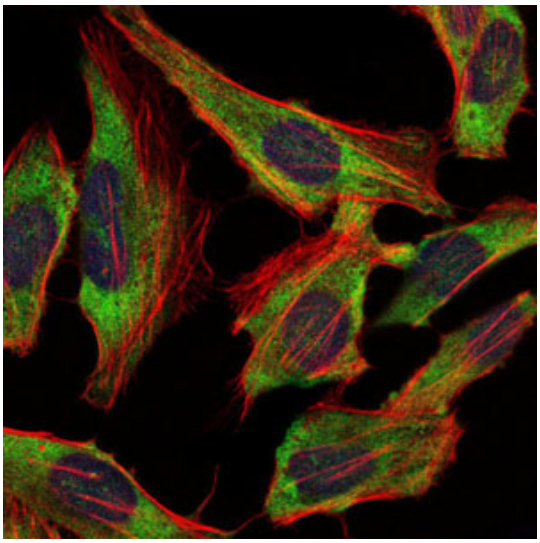


Figure 4: Immunofluorescence analysis of Hela cells using NEFL mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

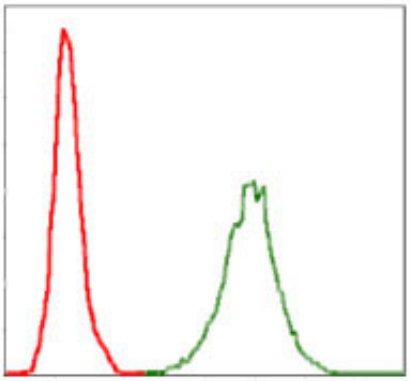


Figure 5: Flow cytometric analysis of Jurkat cells using NEFL mouse mAb (green) and negative control (red).

NEFL Antibody - References

1. BMB Rep. 2008 Dec 31;41(12):868-74. 2. J Hum Genet. 2009 Feb;54(2):94-7.