

**NEFL Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1660a****Specification****NEFL Antibody - Product Information**

Application	WB, IHC, FC, ICC, E
Primary Accession	<a href="#">P07196</a>
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. <br />

**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**

WB~~1/500 - 1/2000  
IHC~~1/200 - 1/1000  
FC~~1/200 - 1/400  
ICC~~N/A  
E~~1/10000

**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.

## 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).

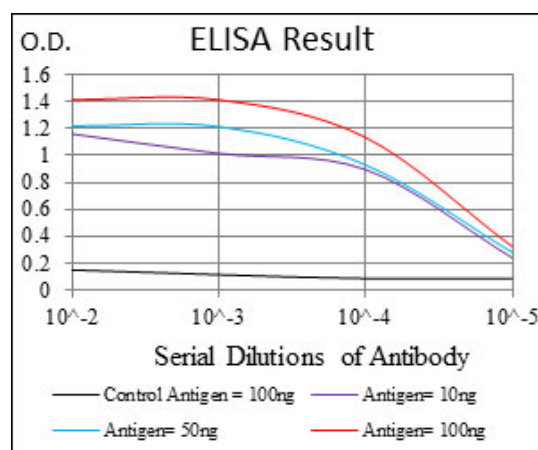
### Cellular Location

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 Cytometry](#)
- [Cell Culture](#)



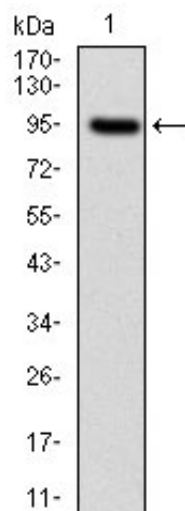


Figure 1: Western blot analysis using NEFL mAb against human NEFL (AA: 422-543) recombinant protein. (Expected MW is 62 kDa)

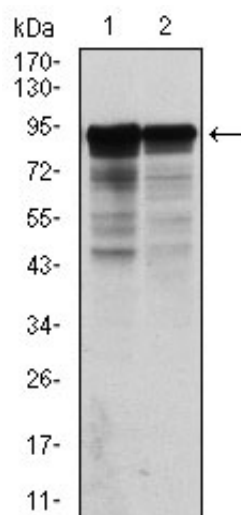


Figure 2: Western blot analysis using NEFL mouse mAb against HeLa (1) and Jurkat (2) cell lysate.

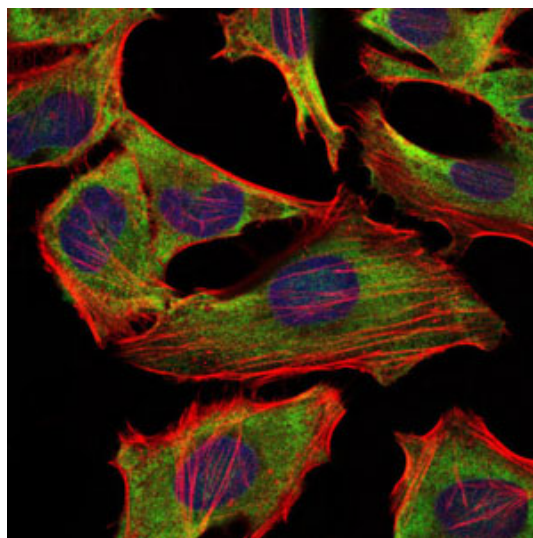


Figure 3: Immunofluorescence analysis of HeLa cells using NEFL mouse mAb (green). Blue: DRAQ5

fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

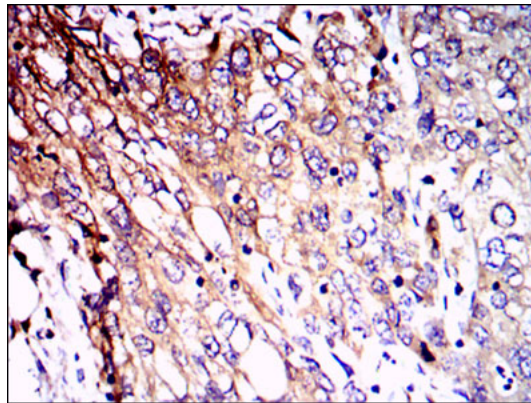


Figure 3: Immunohistochemical analysis of paraffin-embedded lung cancer tissues using NEFL mouse mAb with DAB staining.

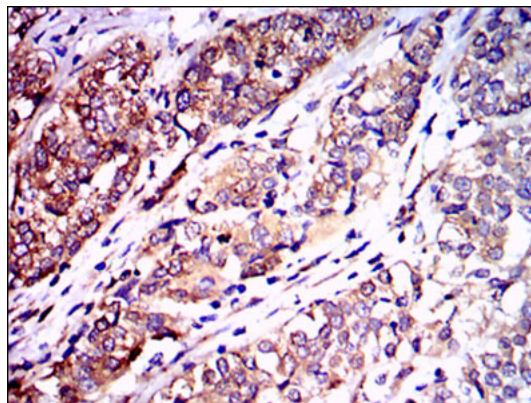


Figure 4: Immunohistochemical analysis of paraffin-embedded bladder cancer tissues using NEFL mouse mAb with DAB staining.

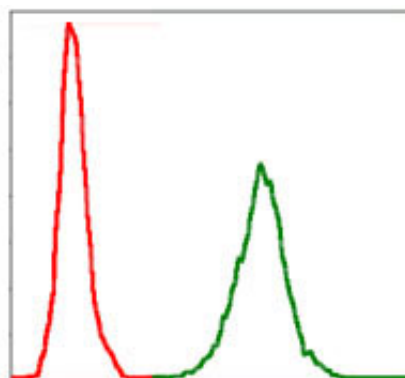


Figure 4: Flow cytometric analysis of Jurkat cells using NEFL mouse mAb (green) and negative control (red).

#### NEFL Antibody - References

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