

Mouse Monoclonal Antibody to NEFM Purified Mouse Monoclonal Antibody Catalog # AO2474a

#### Specification

## **Mouse Monoclonal Antibody to NEFM - Product Information**

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description**  WB, FC, ICC, E <u>P07197</u> Human Mouse Monoclonal Mouse IgG1 102.5kDa KDa

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. ;

Immunogen Purified recombinant fragment of human NEFM (AA: 779-916) expressed in E. Coli.

**Formulation** Purified antibody in PBS with 0.05% sodium azide

Application Note ELISA: 1/10000; WB: 1/500 - 1/2000; ICC: 1/50 - 1/200; FCM: 1/200 - 1/400

#### **Mouse Monoclonal Antibody to NEFM - Additional Information**

Gene ID 4741

Other Names NFM; NEF3; NF-M

**Dilution** WB~~1:1000 FC~~1:10~50 ICC~~N/A E~~N/A

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** 

Mouse Monoclonal Antibody to NEFM is for research use only and not for use in diagnostic or



therapeutic procedures.

# Mouse Monoclonal Antibody to NEFM - Protein Information

Name NEFM

Synonyms NEF3, NFM

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 Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P08553}. Cell projection, axon {ECO:0000250|UniProtKB:P08553}

## Mouse Monoclonal Antibody to NEFM - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Mouse Monoclonal Antibody to NEFM - Images



Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)





Western blot analysis using NEFM mAb against human NEFM (AA: 779-916) recombinant protein. (Expected MW is \*\*\* kDa)



Western blot analysis using NEFM mAb against HEK293 (1) and NEFM (AA: 779-916)-hlgGFc transfected HEK293 (2) cell lysate.



Flow cytometric analysis of Hela cells using NEFM mouse mAb (green) and negative control (red).





Flow cytometric analysis of Raji cells using NEFM mouse mAb (green) and negative control (red).



Immunofluorescence analysis of Hela cells using NEFM mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher

# Mouse Monoclonal Antibody to NEFM - References

1.J Neuropathol Exp Neurol. 2004 Jul;63(7):759-74. ; 2.Neurosci Lett. 2003 Nov 13;351(2):125-9.;