

# NEFH Monoclonal Antibody (RMdO-20)

## Product Details

|                    |   |
|--------------------|---|
| Size               | 200 µg  |
| Species Reactivity | Bovine, Hamster, Human, Mollusc, Mouse, Rabbit, Rat |
| Published Species  | Rat, Human, Mouse                                   |
| Host/Isotype       | Mouse / IgG1, kappa                                 |
| Class              | Monoclonal  |
| Type               | Antibody  |
| Clone              | RMdO-20   |
| Conjugate          | Unconjugated  |
| Immunogen          | Adult Rat neurofilaments                            |
| Form               | Liquid  |
| Concentration      | 0.5 mg/mL   |
| Purification       | purified  |
| Storage buffer     | PBS   |
| Contains           | 0.1% sodium azide                                   |
| Storage Conditions | -20°C   |
| RRID               | AB_2532999  |

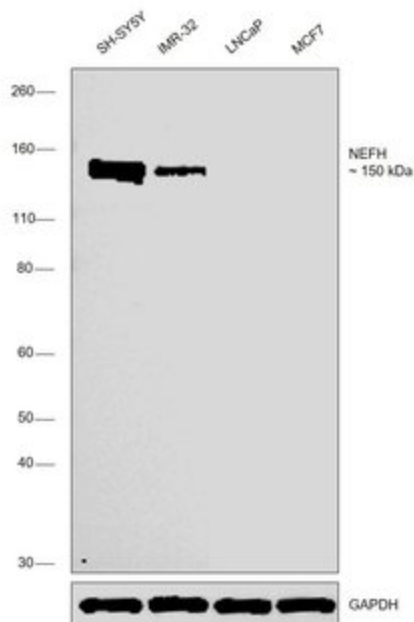
| Applications                              | Tested Dilution | Publications   |
|---|-----------------|----------------|
| Western Blot (WB)                         | 0.5-2 µg/mL     | 1 Publication  |
| Immunohistochemistry (IHC)                | 1:20            | 3 Publications |
| Immunohistochemistry (Paraffin) (IHC (P)) | -               | 2 Publications |
| Immunohistochemistry (Frozen) (IHC (F))   | 1:20            | -              |
| ELISA (ELISA)                             | 0.1-0.5 µg/mL   | -              |
| Immunoprecipitation (IP)                  | 2-5 µg          | -              |
| Immunocytochemistry (ICC/IF)              | 1:20            | 3 Publications |

## Product Specific Information

This antibody reacts with 200 kDa subunit protein of human neurofilament. It specifically recognizes a nonphosphorylated epitope in the tail domain of NF-H. Dephosphorylation of NF-H will increase immunoreactivity with this antibody.

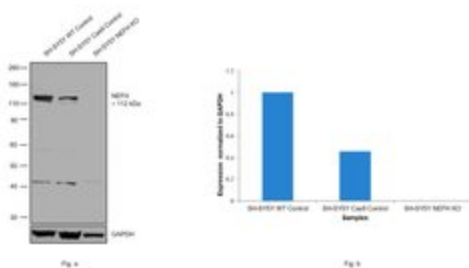
This antibody is suitable for immunohistochemical staining of Bouin's and alcohol-fixed paraffin-embedded or frozen tissue sections. To stain, incubate 30-60 minutes at room temperature or overnight at 4°C.

## Advanced Verification Data



### NEFH Antibody (13-1300)

Antibody specificity was demonstrated by detection of differential basal expression of the target across cell lines tested owing to their inherent genetic constitution. Relative expression of NEFH was observed in SH-SY5Y and IMR-32 in comparison to LNCaP and MCF7 using Anti-NEFH Monoclonal Antibody (RMdO-20) (Product # 13-1300) in Western Blot. Relative expression validation info.



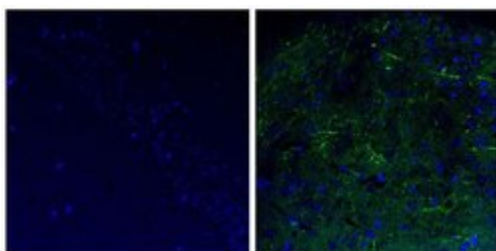
### NEFH Antibody (13-1300)

Antibody specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. A loss of signal was observed for target protein in NEFH KO cell line compared to control cell line using Anti-NEFH Monoclonal Antibody (RMdO-20) (Product # 13-1300). Knockout validation info.

## Product Images For NEFH Monoclonal Antibody (RMdO-20)

### NEFH Antibody (13-1300) in IHC (P)

Immunofluorescent analysis of the neurofilament heavy chain in paraffin-embedded mouse brain tissue (right) compared to a negative control without primary antibody (left). Tissue sections were deparaffinized with xylene, and rehydrated with ethanol. To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0) and microwaved for 8-15 min. Following antigen retrieval, tissues were washed with water and PBS, and then blocked in 0.3% BSA for 30 min at room temperature. Tissues were then probed with a neurofilament heavy chain monoclonal antibody (Product # 13-1300) in 0.3% BSA at a dilution of 1:20 for 1 hour at 37°C. Tissues were then incubated with a Goat anti-Mouse IgG (H+L) Secondary Antibody, DyLight 488 conjugate for 1 hour at 37°C (green). Nuclei (blue) were stained with DAPI. Images were taken at 40X magnification.



View more figures on [thermofisher.com](https://thermofisher.com)

## 9 References

### Western Blot (1)

#### Genes & development

#### Conversion of myoblasts to physiologically active neuronal phenotype.

"Published figure using NEFH/NEFM/NEFL monoclonal antibody (Product # 13-1300) in Immunofluorescence"

Authors: Watanabe Y, Kameoka S, Gopalakrishnan V, Aldape KD, Pan ZZ, Lang FF, Majumder S

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2004

### Immunohistochemistry (3)

#### Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc

#### Double immunolabeling of central nervous system atypical teratoid /rhabdoid tumors.

"13-1300 was used in immunohistochemistry to characterize central nervous system atypical teratoid/rhabdoid tumors"

Authors: Bouffard JP, Sandberg GD, Golden JA, Rorke LB

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2004

#### Genome biology and evolution

#### Evolution of neuronal and endothelial transcriptomes in primates.

"13-1300 was used in Immunohistochemistry to suggest that neuronal and endothelial transcriptomes evolve at different rates within brain tissue."

Authors: Giger T, Khaitovich P, Somel M, Lorenc A, Lizano E, Harris LW, Ryan MM, Lan M, Wayland MT, Bahn S, Pääbo S

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2010

[View more IHC references on thermofisher.com](#)

### Immunohistochemistry (Paraffin) (2)

#### Neuropathology : official journal of the Japanese Society of Neuropathology

#### Cerebral and spinal cord tanycytic ependymomas in a young adult with a mutation in the NF2 gene.

"13-1300 was used in immunohistochemistry - paraffin section to determine the immunohistochemical, ultrastructural and genetic features of a patient with tanycytic ependymoma and that has a heterozygous truncating mutation in the NF2 gene"

Authors: Kuga Y, Ohnishi H, Kodama Y, Takakura S, Hayashi M, Yagi R, Fukutome K, Matsushima K, Okamoto K, Taomoto K, Takahashi H

**Species**  
Human

**Dilution**  
1:50

**Year**  
2014

### More applications with references on thermofisher.com

### ICC/IF (3)

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