

## Neurofilament (NF-H) (Neuronal Marker) Antibody

Mouse Monoclonal Antibody [Clone NF421]

Catalog No	Format	Size
4744-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
4744-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
4744-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

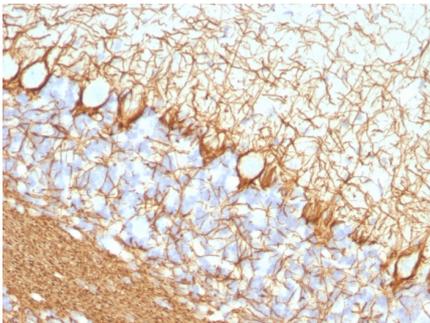
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

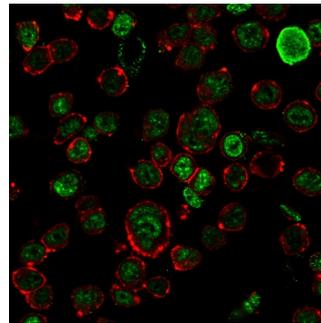
<b>Clone</b>	NF421
<b>Gene Name</b>	NEFH
<b>Immunogen</b>	Recombinant full-length human neurofilament (NEFH) protein
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG1 / Kappa
<b>Mol. Weight of Antigen</b>	200kDa
<b>Cellular Localization</b>	Axon, Cell projection, Cytoplasm, Cytoskeleton
<b>Species Reactivity</b>	Chicken, Human, Mouse, Pig, Rat
<b>Positive Control</b>	HEK293 cells; Brain, Neuroblastoma.

\*Optimal dilution for a specific application should be determined.

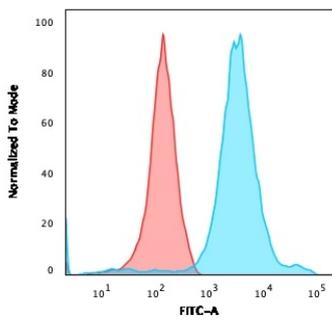
### Product Images for Neurofilament (NF-H) (Neuronal Marker) Antibody



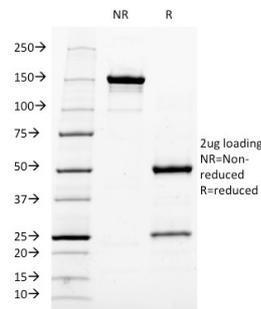
Formalin-fixed, paraffin-embedded Rat Cerebellum stained with Neurofilament Mouse Monoclonal Antibody (NF421).



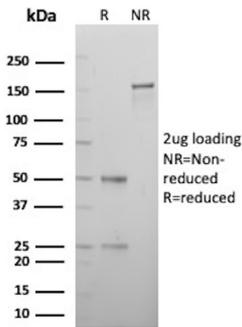
Immunofluorescence staining of HEK293 cells using Neurofilament Mouse Monoclonal Antibody (NF421) followed by goat anti-Mouse IgG conjugated to CF488 (green). Membrane stained with Phalloidin (Red).



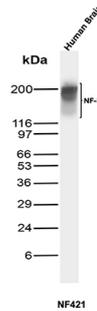
Flow Cytometric Analysis of HEK293 cells using Neurofilament Mouse Monoclonal Antibody (NF421) followed by goat anti-Mouse IgG-CF488 (Blue); Isotype control (Red).



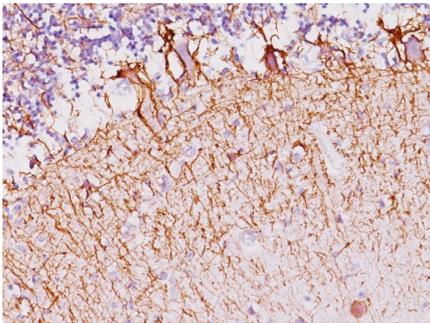
SDS-PAGE Analysis Purified Neurofilament Mouse Monoclonal Antibody (NF421). Confirmation of Integrity and Purity of Antibody



SDS-PAGE Analysis of Purified Neurofilament heavy polypeptide Mouse Monoclonal Antibody (NF421). Confirmation of Purity and Integrity of Antibody.



Western Blot Analysis of Human Brain Tissue Lysate using Neurofilament Mouse Monoclonal Antibody (NF421).



Formalin-fixed, paraffin-embedded human Cerebellum stained with Neurofilament Mouse Monoclonal Antibody (NF421).

### Specificity & Comments

This MAb reacts with a 200kDa protein, identified as heavy sub-unit of neurofilaments (NF-H). Neurofilaments make up the main structural elements of axons and dendrites and are found in neurons, peripheral nerves, and sympathetic ganglion cells. Neurofilaments consist of three major subunits with molecular weights of 68kDa (NF-L), 160kDa (NF-M) and 200kDa (NF-H). Anti-neurofilament stains a number of neural, neuroendocrine, and endocrine tumors. Neuromas, ganglioneuromas, gangliogliomas, ganglioneuroblastomas, and neuroblastomas stain positively for anti-neurofilament. Neurofilaments are also present in paragangliomas as well as adrenal and extra-adrenal pheochromocytomas. Carcinoids, neuroendocrine carcinomas of the skin, and oat cell carcinomas of the lung also express neurofilament.

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

200ug/ml of Ab produced in HEK293 cell mammalian-based expression system. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

### Research Areas

Cardiovascular, Neuroscience