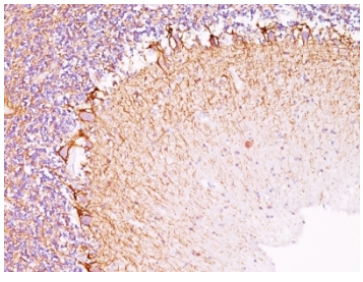
Neurofilament Antibody [clone NR-4] (V2760)

Catalog No.	Formulation	Size
V2760-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2760-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2760SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2760IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

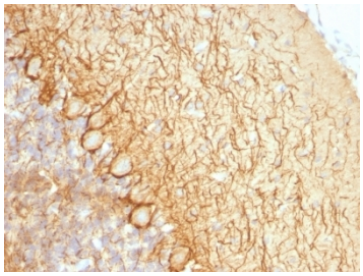
Citations (8)

Bulk quote request

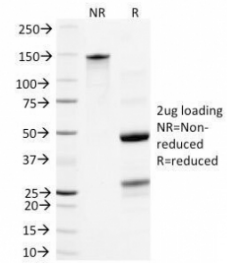
Availability	1-3 business days
Species Reactivity	Human, Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	NR-4
Purity	Protein G affinity chromatography
UniProt	P07196
Localization	Cytoplasmic, membranous
Applications	Immunofluorescence : 1-2ug/ml Flow Cytometry : 1-2ug/10^6 cells Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT
Limitations	This Neurofilament antibody is available for research use only.



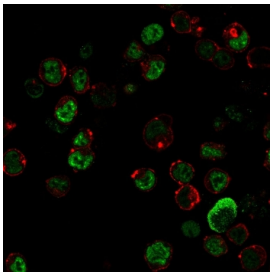
IHC: Formalin-fixed, paraffin-embedded human cerebellum stained with Neurofilament antibody (NR-4).



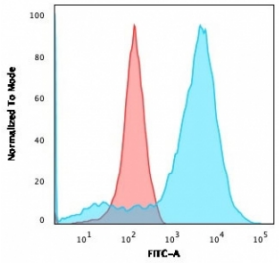
IHC: Formalin-fixed, paraffin-embedded rat cerebellum stained with Neurofilament antibody (NR-4).



SDS-PAGE Analysis of Purified, BSA-Free Neurofilament Antibody (clone NR-4). Confirmation of Integrity and Purity of the Antibody.



Immunofluorescent staining of permeabilized human HEK293 cells with Neurofilament antibody (clone NR-4, green) and Phalloidin (red).



Flow cytometry testing of permeabilized human HEK293 cells with Neurofilament antibody (clone NR-4); Red=isotype control, Blue= Neurofilament antibody.

Description

This mAb reacts with a 68kDa protein, identified as light sub-unit of neurofilaments (NF-L). 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 cell carcinomas of the lung also express neurofilament.

Application Notes

Optimal dilution of the Neurofilament antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Crude neurofilament preparation from porcine spinal cord was used as the immunogen for the Neurofilament antibody.

Storage

Store the Neurofilament antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).