

DESCRIPTION	
Species Reactivity	Human
Specificity	Detects Human and Bovine NF-H in direct ELISA.
Source	Monoclonal Mouse IgG ₁ Clone # 1053309
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Natural Neurofilament H (200 kD) Bovine Protein
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

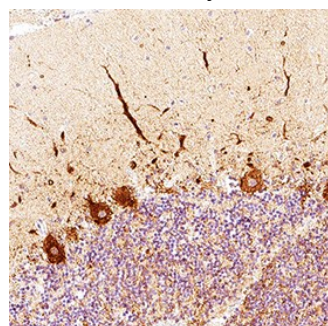
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	Immersion fixed HeLa (positive), K562 (negative) cells and Raji (negative) cells.
Immunohistochemistry	3-25 µg/mL	Immersion fixed paraffin-embedded sections of human brain cerebellum

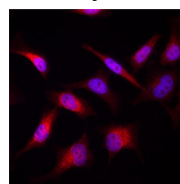
DATA

Immunohistochemistry

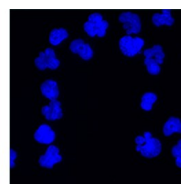


Detection of NF-H in Human Brain Cerebellum. NF-H was detected in immersion fixed paraffin-embedded sections of human brain cerebellum using Mouse Anti-Human NF-H Monoclonal Antibody (Catalog # MAB31083) at 3 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in Purkinje neurons. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

Immunocytochemistry



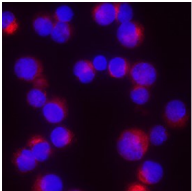
HeLa (Positive) cells



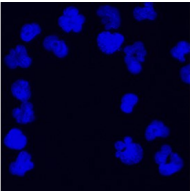
Raji (Negative) cells

Detection of NF-H in HeLa human cervical epithelial carcinoma cell line (positive) and Raji human Burkitt's lymphoma cell line (negative) cells. NF-H was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line (positive) and Raji human Burkitt's lymphoma cell line (negative) cells using Mouse Anti-Human NF-H Monoclonal Antibody (Catalog # MAB31083) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

Immunocytochemistry



k562 (Positive) cells



Raji (Negative) cells

Detection of NF-H in K562 Human Chronic Myelogenous Leukemia Cell Line (Positive) and Raji Human Burkitt's Lymphoma Cell Line (Negative) Cells. NF-H was detected in immersion fixed K562 Human Chronic Myelogenous Leukemia Cell Line (Positive) and Raji Human Burkitt's Lymphoma Cell Line (Negative) Cells using Mouse Anti-Human NF-H Monoclonal Antibody (Catalog # MAB31083) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The human Neurofilament Heavy chain, also known as NF-H and NEFH, is a phosphorylated cytoskeletal intermediate filament protein that is expressed in neurons. Neurofilaments are trimers that always contain the 68 kDa NF-L and variably contain 125 kDa NF-M and 200 kDa NF-H. In the region used for immunization, mouse and rat NF-H are each 93% identical to human NF-H.