

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human NF-L in direct ELISAs and human, mouse and rat NF-L in Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human (rh) NF-H or rhNF-M is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 268014
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human NF-L Met1-Asp338 Accession # P07196
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.

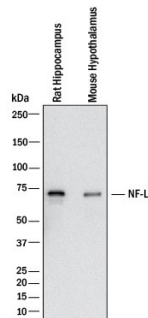
APPLICATIONS

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
Western Blot	1 µg/mL	Mouse brain (hypothalamus) and rat brain (hippocampus)
Immunocytochemistry	8 µg/mL	Immersion fixed U251 human myeloma cell line (positive) and K562 human chronic myelogenous leukemia cell line (negative)
Immunohistochemistry	3-25 µg/mL	See Below

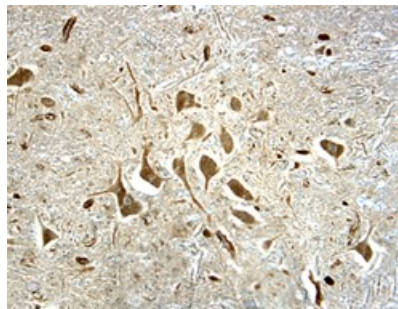
DATA

Western Blot



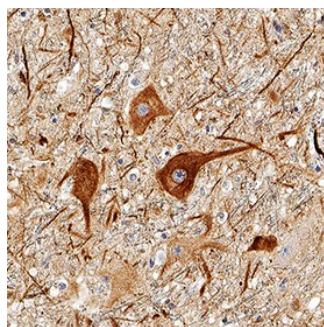
Detection of Mouse and Rat NF-L by Western Blot. Western blot shows lysates of mouse brain (hypothalamus) and rat brain (hippocampus). PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human/Mouse/Rat NF-L Monoclonal Antibody (Catalog # MAB2216) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for NF-L at approximately 74 kDa (as indicated). This experiment was conducted under reducing conditions and using Western Blot Buffer Group 1.

Immunohistochemistry



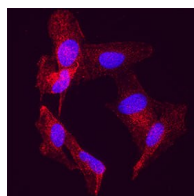
NF-L in Human Spinal Cord. NF-L was detected in immersion fixed paraffin-embedded sections of human spinal cord using 25 µg/mL Mouse Anti-Human NF-L Monoclonal Antibody (Catalog # MAB2216) overnight at 4 °C. Tissue was stained with the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counter-stained with hematoxylin (blue). Specific labeling was localized to the cytoplasm in motor neurons. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Immunohistochemistry

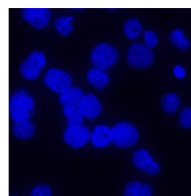


NF-L in Human Brain. NF-L was detected in immersion fixed paraffin-embedded sections of human brain (substantia nigra) using Mouse Anti-Human NF-L Monoclonal Antibody (Catalog # MAB2216) at 3 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUcyl™ HRP Polymer Antibody (Catalog # VC001). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in neurons. View our protocol for [IHC Staining with VisUcyl HRP Polymer Detection Reagents](#).

Immunocytochemistry



U-251 cells (positive)



K-562 cells (negative)

NF-L in U251 human myeloma cell line (positive) and K562 human chronic myelogenous leukemia cell line (negative). NF-L was detected in immersion fixed U251 human myeloma cell line (positive) and K562 human chronic myelogenous leukemia cell line (negative) using Mouse Anti-Human/Mouse/Rat NF-L Monoclonal Antibody (Catalog # MAB2216) 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 Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 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

NF-L is a 68 kDa light chain cytoskeletal intermediate filament protein that is expressed in neurons. It associates with the 125 kDa NF-M and the 200 kDa NF-H to form neurofilaments.