

Basic Information

Product Name	Anti-NF-L/NEFL Antibody	
Gene Name	NEFL	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, IF, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human NEFL/NF-L recombinant protein (Position: F4-A463).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	72 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunofluorescence (IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

Background Information

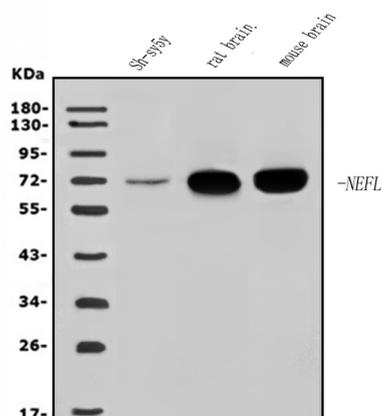
Neurofilament light polypeptide (NFL), also known as neurofilament light chain, is a neurofilament protein that in humans is encoded by the NEFL gene. Neurofilaments are type IV intermediate filament heteropolymers composed of light, medium, and heavy chains. Neurofilaments comprise the axoskeleton and they functionally maintain the neuronal caliber. They may also play a role in intracellular transport to axons and dendrites. This gene encodes the light chain neurofilament protein. Mutations in this gene cause Charcot-Marie-Tooth disease types 1F (CMT1F) and 2E (CMT2E), disorders of the peripheral nervous system that are characterized by distinct neuropathies. A pseudogene has been

identified on chromosome Y.

Reference

Anti-NF-L/NEFL Antibody被引用在1文献中。

Selected Validation Data



Western blot analysis of NF-L/NEFL using anti-NF-L/NEFL antibody (A02482-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

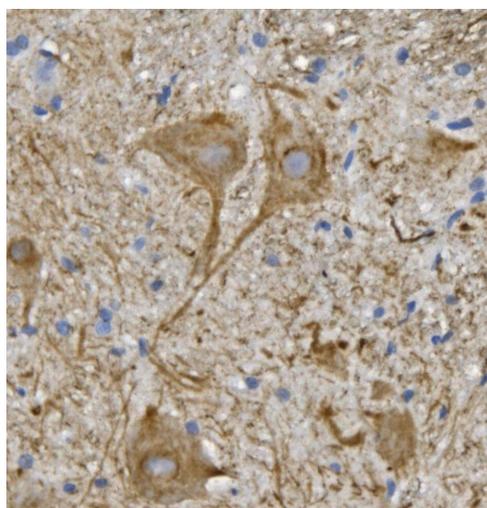
Lane 1: human SH-SY5Y whole cell lysates,

Lane 2: rat brain tissue lysates,

Lane 3: mouse brain tissue lysates.

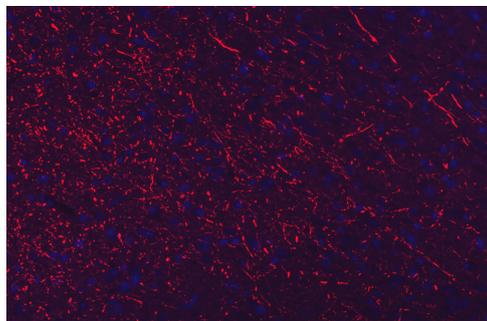
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-NF-L/NEFL antigen affinity purified polyclonal antibody (A02482-1) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for NF-L/NEFL at approximately 72 kDa. The expected band size for NF-L/NEFL is at 62 kDa.

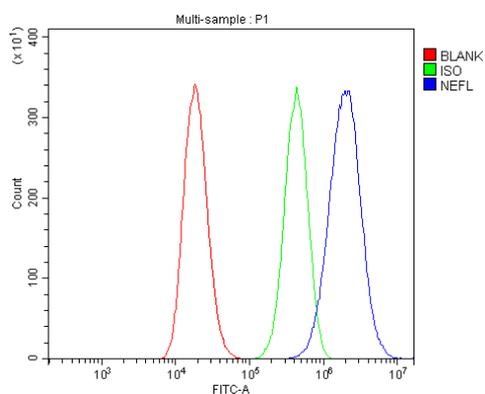


IHC analysis of NF-L/NEFL using anti-NF-L/NEFL antibody (A02482-1).

NF-L/NEFL was detected in a paraffin-embedded section of mouse spinal cord tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-NF-L/NEFL Antibody (A02482-1) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



IF analysis using anti- NEFL antibody (A02482-1). detected in paraffin-embedded section of rat brain tissue. The tissue section were stained using the cy3-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog # BA1032) and counterstained with DAPI (blue).



Flow Cytometry analysis of 293T cells using anti-NF-L/NEFL antibody (A02482-1).

Overlay histogram showing 293T cells stained with A02482-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-NF-L/NEFL Antibody (A02482-1) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.