

ARG52349 anti-Neurofilament NF-L antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Chicken Polyclonal antibody recognizes Neurofilament NF-L
Tested Reactivity	Hu, Ms, Rat
Predict Reactivity	Chk
Tested Application	ICC/IF, IHC-Fr, WB
Host	Chicken
Clonality	Polyclonal
Isotype	IgY
Target Name	Neurofilament NF-L
Species	Bovine
Immunogen	Preparation of bovine spinal cord NF-L
Conjugation	Un-conjugated
Alternate Names	Neurofilament triplet L protein; 68 kDa neurofilament protein; CMT1F; NF68; NFL; CMT2E; Neurofilament light polypeptide; NF-L; PPP1R110

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:2000 - 1:5000
	IHC-Fr	1:2000
	WB	1:5000 - 1:10000
Application Note	<p>Specific for the ~ 68 kDa Neurofilament L protein in Western blots and works well on frozen sections, cells in tissue culture and on mildly formalin fixed histological sections.</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p>	
Observed Size	~ 68 kDa	

Properties

Form	Liquid
Purification	Total IgY fraction
Buffer	Total IgY fraction in PBS and 10 mM Sodium azide
Preservative	10 mM Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

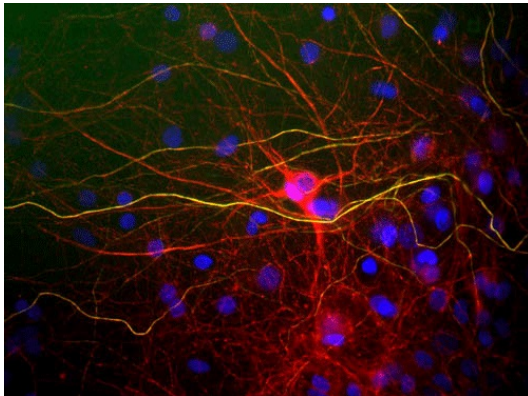
Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	NEFL
Gene Full Name	neurofilament, light polypeptide
Background	Neurofilaments are the 10nm or intermediate filament proteins found specifically in neurons, and are composed predominantly of three major proteins called NF-L, NF-M and NF-H . NF-L is the neurofilament light or low molecular weight polypeptide and runs on SDS-PAGE gels at about 68kDa. Antibodies to NF-L are useful for identifying neuronal cells and their processes in tissue sections and in tissue culture. Mutations in the protein coding region of the human NF-L gene cause some forms of Charcot-Marie-Tooth disease .
Function	Neurofilaments usually contain three intermediate filament proteins: L, M, and H which are involved in the maintenance of neuronal caliber. [UniProt]
Research Area	Controls and Markers antibody; Developmental Biology antibody; Neuroscience antibody; Signaling Transduction antibody; Neuronal Cytoskeletal antibody; Neurofilament antibody; Intermediate Neurofilament antibody
Calculated Mw	62 kDa
PTM	O-glycosylated. Phosphorylated in the head and rod regions by the PKC kinase PKN1, leading to the inhibition of polymerization. Ubiquitinated in the presence of TRIM2 and UBE2D1.

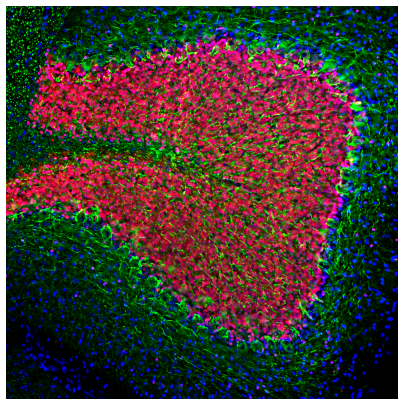
Images



ARG52349 anti-Neurofilament NF-L antibody ICC/IF image

Immunofluorescence: Mixed cultured rat neurons and glia stained with ARG52349 anti-Neurofilament NF-L antibody (red) at 1:5000 dilution.

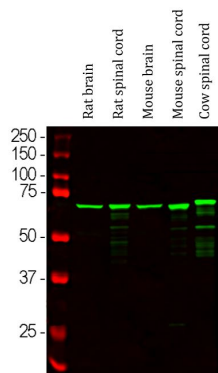
The NF-L protein is assembled into neurofilaments which are found throughout the axons, dendrites, and perikarya.



ARG52349 anti-Neurofilament NF-L antibody IHC-Fr image

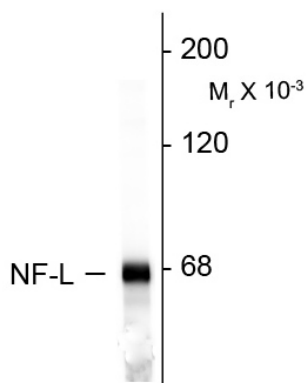
Immunohistochemistry: Frozen section of Rat cerebellum tissue stained with ARG52349 anti-Neurofilament NF-L antibody (green) at 1:2000 dilution, and co-stained with [ARG52283](#) anti-FOX3 / NeuN antibody [1B7] (red) at 1:5000 dilution. (Sample preparation: Following transcardial perfusion of Rat with 4% paraformaldehyde, brain was post fixed for 24 hours, cut to 45 μ M, and free-floating sections were stained with the above antibodies.)

The NF-L antibody labels perikarya and processes of neuronal cells, particularly strongly the axons of basket cells, while the FOX3 / NeuN antibody stains the nuclei and proximal cytoplasm of neurons.



ARG52349 anti-Neurofilament NF-L antibody WB image

Western blot: Rat brain, Rat spinal cord, Mouse brain, Mouse spinal cord and Cow spinal cord lysates stained with ARG52349 anti-Neurofilament NF-L antibody (green) at 1:20000 dilution.



ARG52349 anti-Neurofilament NF-L antibody WB image

Western blot: Rat cortex lysate stained with ARG52349 anti-Neurofilament NF-L antibody.