

## ARG10732 anti-Neurofilament NF-L antibody

Package: 50 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes Neurofilament NF-L
Tested Reactivity	Hu, Ms, Rat
Predict Reactivity	Bov, Pig
Tested Application	ICC/IF, IHC-Fr, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Neurofilament NF-L
Species	Human
Immunogen	Recombinant Human NF-L protein
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	1:5000
	IHC-Fr	1:5000
	WB	1:10000 - 1:15000

**Application Note** \* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

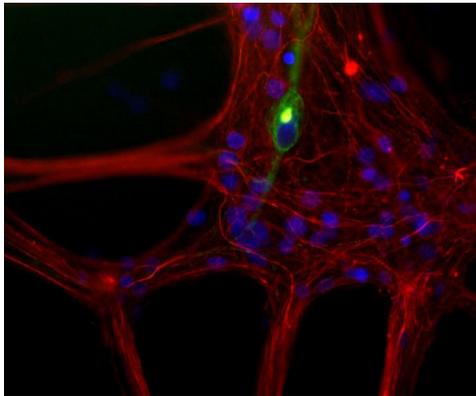
### Properties

Form	Liquid
Purification	Unpurified.
Buffer	Serum.
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

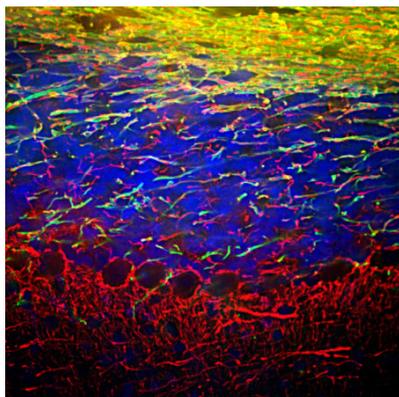
Gene Symbol	NEFL
Gene Full Name	neurofilament, light polypeptide
Background	Neurofilaments are type IV intermediate filament heteropolymers composed of light, medium, and heavy chains. Neurofilaments comprise the axoskeleton and they functionally maintain the neuronal caliber. They may also play a role 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. [provided by RefSeq, Oct 2008]
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



ARG10732 anti-Neurofilament NF-L antibody ICC/IF image

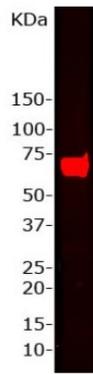
Immunocytochemistry: Mixed neuron / glia cultures from newborn Rat brain stained with monoclonal 7C5 to peripherin (green) and co-stained with ARG10732 anti-Neurofilament NF-L antibody (red). A class of large neurons, like the one in the middle of this image, contains peripherin, while the majority of neurons and their processes contain NF-L and not peripherin. Interestingly, the peripherin positive cells often contain a cytoplasmic inclusion next to the nucleus which stains for both peripherin and NF-L, and so appears golden in this image. The blue channel reveals the localization of DNA.



ARG10732 anti-Neurofilament NF-L antibody IHC-Fr image

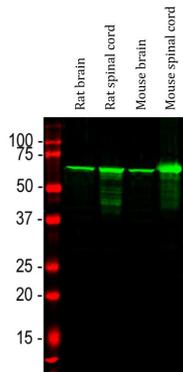
Immunohistochemistry: Frozen section of Mouse cerebellum stained with ARG10732 anti-Neurofilament NF-L antibody (red) at 1:5000 dilution and costained with [ARG52344](#) anti-Myelin Basic Protein antibody (green) at 1:5000 dilution. (Sample preparation: Following transcardial perfusion of Mouse with 4% paraformaldehyde, brain was post fixed for 24 hours, cut to 45  $\mu$ M, and free-floating sections were stained with above antibodies.)

The NF-L antibody labels dendrites and axons of neuronal cells, and Myelin Basic Protein antibody stains myelin sheathes around axons.



ARG10732 anti-Neurofilament NF-L antibody WB image

Western blot: Whole Rat brain homogenate stained with ARG10732 anti-Neurofilament NF-L antibody at 1:15000 dilution. A prominent band running with an apparent SDS-PAGE molecular weight of ~68 kDa corresponds to rodent NF-L.



ARG10732 anti-Neurofilament NF-L antibody WB image

Western blot: Rat brain, Rat spinal cord, Mouse brain and Mouse spinal cord lysates stained with ARG10732 anti-Neurofilament NF-L antibody (green) at 1:20000 dilution.