

## ARG11122 anti-Neurofilament NF-L antibody [1B11]

Package: 50 µl  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [1B11] recognizes Neurofilament NF-L
Tested Reactivity	Hu, Ms, Rat, Cow, Hrs, Pig
Tested Application	ICC/IF, IHC-Fr, WB
Host	Mouse
Clonality	Monoclonal
Clone	1B11
Isotype	IgG1
Target Name	Neurofilament NF-L
Species	Pig
Immunogen	Pig Neurofilament NF-L.
Epitope	Within the C terminal segment of alpha-helical region, a highly conserved region known as Coil II, corresponding to aa. 256-400 of the human 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	1:2000
	IHC-Fr	1:2000
	WB	1:10000 - 1:20000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 62 kDa	

### Properties

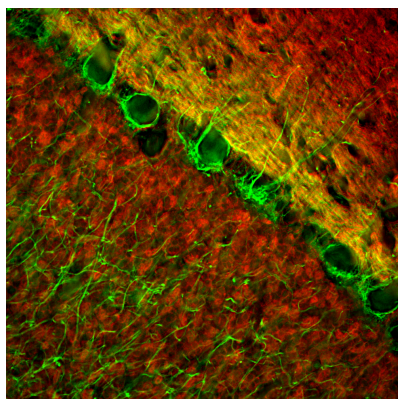
Form	Liquid
Purification	Purified
Buffer	PBS, 5 mM Sodium azide and 50% Glycerol.
Preservative	5 mM Sodium azide
Stabilizer	50% Glycerol

Concentration	1 mg/ml
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. 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]
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. [UniProt]

## Images

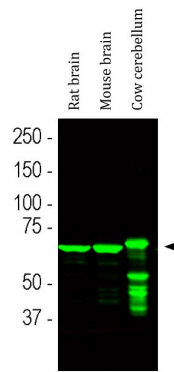


ARG11122 anti-Neurofilament NF-L antibody [1B11] IHC-Fr image

Immunohistochemistry: Frozen section of cow cerebellum tissue stained with ARG11122 anti-Neurofilament NF-L antibody [1B11] (green) at 1:2000 dilution, and co-stained with [ARG10688](#) anti-Visinin like 1 antibody (red) at 1:2000 dilution. Hoechst (blue) for nuclear staining. (Sample preparation: Small section of cow cerebellum was fixed in 4% paraformaldehyde for 3 days, cut to 45  $\mu$ M, and free-floating sections were stained with the above antibodies.).

### ARG11122 anti-Neurofilament NF-L antibody [1B11] WB image

Western blot: Rat brain, Mouse brain and Cow cerebellum lysates stained with ARG11122 anti-Neurofilament NF-L antibody [1B11] (green) at 1:20000 dilution.



Strong band at about 68-70 kDa corresponds to NF-L protein, with the cow protein appearing slightly larger in molecular size as expected. Low molecular weight bands detected in cow brain sample are likely post mortem proteolytic forms of NF-L.