

ARG55971
anti-Neurofilament NF-H antibody [RT97]Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [RT97] recognizes Neurofilament NF-H
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Clone	RT97
Isotype	IgG1
Target Name	Neurofilament NF-H
Species	Rat
Immunogen	The triton-X 100 insoluble protein fraction of Rat brain.
Conjugation	Un-conjugated
Alternate Names	Neurofilament heavy polypeptide; 200 kDa neurofilament protein; NF-H; Neurofilament triplet H protein; NFH

Application Instructions

Application table	Application	Dilution
	IHC-P	2 - 5 µg/ml
	WB	1 - 2 µg/ml
Application Note	IHC-P: Antigen Retrieval: Boil tissue section in 10 mM Citrate buffer (pH 6.0) for 10-20 min, followed by cooling at RT for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Human brain	

Properties

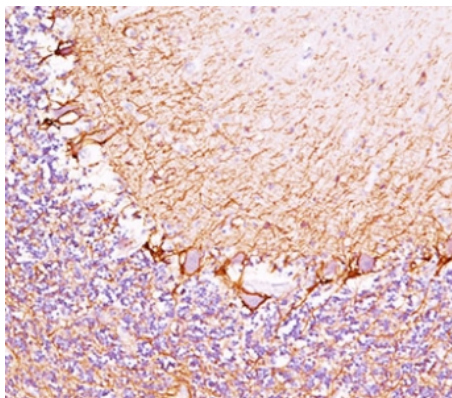
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.05% Sodium azide and 0.1 mg/ml BSA
Preservative	0.05% Sodium azide
Stabilizer	0.1 mg/ml BSA
Concentration	0.2 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C 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

Database links	GeneID: 380684 Mouse GeneID: 4744 Human Swiss-port # P12036 Human Swiss-port # P19246 Mouse
Gene Symbol	Nefh
Gene Full Name	neurofilament, heavy polypeptide
Background	Neurofilaments are type IV intermediate filament heteropolymers composed of light, medium, and heavy chains. Neurofilaments comprise the axoskeleton and functionally maintain neuronal caliber. They may also play a role in intracellular transport to axons and dendrites. This gene encodes the heavy neurofilament protein. This protein is commonly used as a biomarker of neuronal damage and susceptibility to amyotrophic lateral sclerosis (ALS) has been associated with mutations in this gene. [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. NF-H has an important function in mature axons that is not subserved by the two smaller NF proteins. [UniProt]
Highlight	Related products: Neurofilament NF H antibodies ; Neurofilament NF H ELISA Kits ; Neurofilament NF H Duos / Panels ; Anti-Mouse IgG secondary antibodies ; Related news: Neuronal Development Marker
Research Area	Neuroscience antibody; Signaling Transduction antibody; Neurofilament antibody; Intermediate Neurofilament antibody
Calculated Mw	112 kDa
PTM	There are a number of repeats of the tripeptide K-S-P, NFH is phosphorylated on a number of the serines in this motif. It is thought that phosphorylation of NFH results in the formation of interfilament cross bridges that are important in the maintenance of axonal caliber. Phosphorylation seems to play a major role in the functioning of the larger neurofilament polypeptides (NF-M and NF-H), the levels of phosphorylation being altered developmentally and coincidentally with a change in the neurofilament function. Phosphorylated in the head and rod regions by the PKC kinase PKN1, leading to the inhibition of polymerization.
Cellular Localization	Cytoplasmic



ARG55971 anti-Neurofilament NF-H antibody [RT97] IHC-P image

Immunohistochemistry: Cerebellum stained with ARG55971 anti-Neurofilament NF-H antibody [RT97].



ARG55971 anti-Neurofilament NF-H antibody [RT97] WB image

Western blot: Human brain lysate stained with ARG55971 anti-Neurofilament NF-H antibody [RT97].
