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NEFH Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1768a

Product Information

Application	WB, IHC, E
Primary Accession	P12036
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	8H10
Isotype	IgG1
Calculated MW	111838
Description	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.
Immunogen	Purified recombinant fragment of human NEFH (AA: 968-1020) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	4744
Other Names	Neurofilament heavy polypeptide, NF-H, 200 kDa neurofilament protein, Neurofilament triplet H protein, NEFH, KIAA0845, NFH
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	NEFH Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NEFH

Synonyms	KIAA0845, NFH
Function	Neurofilaments usually contain three intermediate filament proteins: NEFL, NEFM, and NEFH which are involved in the maintenance of neuronal caliber. NEFH has an important function in mature axons that is not subserved by the two smaller NF proteins. May additionally cooperate with the neuronal intermediate filament proteins PRPH and INA to form neuronal filamentous networks (By similarity).
Cellular Location	Cytoplasm, cytoskeleton. Cell projection, axon {ECO:0000250|UniProtKB:P19246}

References

1.J Neurol Sci. 2011 May 15;304(1-2):117-21. 2.Neurochem Res. 2011 Dec;36(12):2287-91.

Images

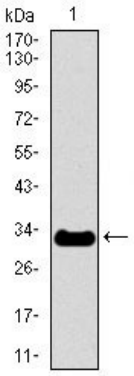

Figure 1: Western blot analysis using NEFH mAb against human NEFH recombinant protein. (Expected MW is 31.2 kDa)

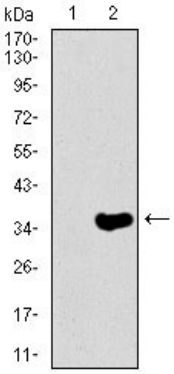

Figure 2: Western blot analysis using NEFH mAb against HEK293 (1) and NEFH (AA: 968-1020)-hIgGFc transfected HEK293 (2) cell lysate.

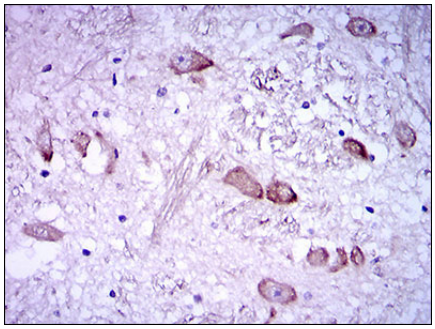

Figure 3: Immunohistochemical analysis of paraffin-embedded medulla oblongata tissues using NEFH mouse mAb with DAB staining.