

Product datasheet for **TA336606**

NFH (NEFH) Mouse Monoclonal Antibody [Clone ID: NAP4]

Product data:

Product Type:	Primary Antibodies
Clone Name:	NAP4
Applications:	WB
Recommended Dilution:	WB: 1:5000, ELISA: 1:100-1:2000, IHC: 1:1000, IHC-P: 1:1000
Reactivity:	Human, Mouse, Rat, Mammalian, Avian
Host:	Mouse
Isotype:	IgG1, kappa
Clonality:	Monoclonal
Immunogen:	Native Neurofilament Heavy purified from pig spinal cord [UniProt# P12037]
Formulation:	Preservative: 0.05% Sodium Azide. Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Ascites
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	210 kDa
Gene Name:	neurofilament, heavy polypeptide
Database Link:	NP_066554 Entrez Gene 24587 Rat Entrez Gene 380684 Mouse Entrez Gene 4744 Human P12036



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Background:

Neuronal intermediate filaments (NIF) are found specifically on neurons where they play key role in maintaining neuronal morphology as well as in regenerating myelinated axons. NIF contain three subunits: a light polypeptide (NEFL/NFL), a medium polypeptide (NEFM/NFM), and a heavy polypeptide (NEFH/NFH), with molecular weights of 68, 160, and 212 kD respectively. 200kD neurofilament heavy (NEFH) is one of the major components of neuronal cytoskeleton NIF and NEFH gene was originally proposed as a DNA marker for presymptomatic diagnosis in neurofibromatosis type 2 (NF2). NEFH facilitate interactions between NIF and brain mitochondria with binding efficiency dependent upon mitochondrial membranes potential. NEFH and beta-catenin are constituents in postsynaptic density (PSD) in CNS and NEFH is essential for maintaining normal cell integrity. Diminished NEFH levels are seen in certain cancers including human autonomic nerve tumors or central neurocytomas, prostate cancer, clear-cell epithelioid tumor and small cell lung carcinoma. Fibroblasts overexpressing NEFH are distorted, multinucleated, and possess inclusions, typical changes seen in neuropathies, and defects in NEFH are linked to susceptibility to ALS.

Synonyms:

NFH

Note:

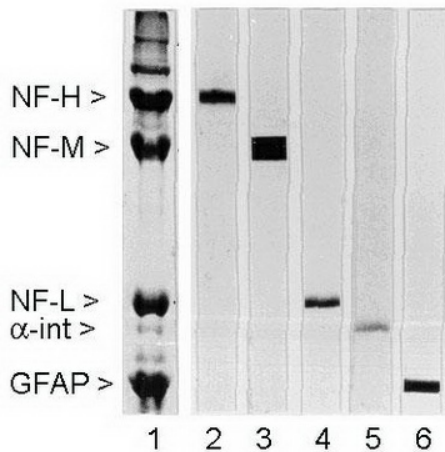
This 200kDa Neurofilament Heavy antibody can be used for ELISA, Immunohistochemistry on paraffin-embedded sections and Western blot.

Protein Families:

Druggable Genome

Protein Pathways:

Amyotrophic lateral sclerosis (ALS)

Product images:


Western Blot: 200kDa Neurofilament Heavy Antibody (NAP4) TA336606 - Rat spinal cord homogenate showing the major intermediate filament proteins of the nervous system (lane 1). The remaining lanes show blots of this material stained with various antibody