

Goat Neurofilament NF-H Polyclonal Antibody | anti-NF-H antibody

Neurofilament NF-H

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA76721	Goat	Human, Mouse, Rat, Bovine, Porcine	Immunofluorescence, Immunohistochemistry, Western Blot, Immunocytochemistry

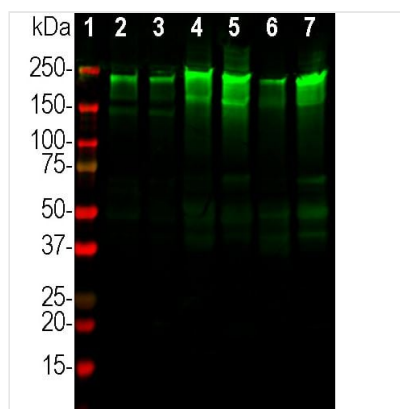
PRODUCT SYNONYMS

Neurofilament NF-H; Polyclonal Antibody; anti-NF-H antibody

PRODUCT SPECIFICATIONS

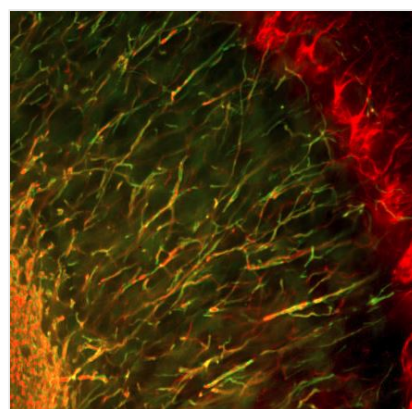
Host	Goat
Reactivity	Human, Mouse, Rat, Bovine, Porcine
Clonality	Polyclonal
Isotype	Goat IgG
Form/Format	Liquid. Purified antibody at 1mg/mL in 50% PBS, 50% glycerol plus 5mM NaN3
Applicable Applications for anti-NF-H antibody	IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot), ICC (Immunocytochemistry)
Immunogen	Native NF-H purified from bovine spinal cord
Preparation and Storage	Antibody can also be aliquotted and stored frozen at -20 degree C in a manual defrost freezer for sixmonths without detectable loss of activity. The antibody can be stored at 2 degree - 8 degree C for 1 month without detectable loss of activity. Avoid repeated freeze-thaw cycles.

IMAGES



WB (Western Blot)

Western blot analysis of tissue lysates from different species using goat pAb to NF-H, AAA76721, dilution 1:20,000 in green: [1] protein standard (red), [2] rat brain, [3] mouse brain, [4] cow cerebellum, [5] cow spinal cord, [6] pig hippocampus and [7] pig spinal cord. Strong band at about 220kDa corresponds to the major phospho-NF-H subunit. Smaller proteolytic fragments of NF-H are also detected in some preparations.



IF (Immunofluorescence)

Immunofluorescence analysis of mouse cerebellum section stained with goat pAb to NF-H, AAA76721, dilution 1:3,000 in red, and costained with mouse mAb to myelin basic protein (MBP) in green. The NF-H antibody labels axons of basket and Purkinje cells and others. The MBP antibody stains oligodendrocyte cell bodies and the myelin sheaths around axons in the granular layer at center and the white matter at bottom left.

ADDITIONAL INFORMATION

Related Product Information for anti-NF-H antibody	Neurofilaments are the 10nm or intermediate filament proteins found specifically in neurons, and are composed predominantly of three major proteins called NF-L, NF-M and NF-H, though other proteins may also be present. NF-H is the neurofilament high or heavy molecular weight polypeptide and runs on SDS-PAGE gels at 200-220 kDa, with some variability across species boundaries. Antibodies to NF-H are useful for identifying axonal processes in tissue sections and in culture. NF-H antibodies can also be useful in visualizing neurofilament accumulations seen in many neurological disorders, such as Amyotrophic Lateral Sclerosis (also known as Lou Gehrig's disease), Alzheimer's disease and following traumatic injury. The phosphorylated axonal form of NF-H usually referred to as pNF-H, can be detected in blood and CSF following a variety of damage and disease states resulting in axonal compromise, and antibodies such as this can be used to quantify such ongoing axonal loss. This antibody was raised against biochemically isolated NF-H purified from bovine spinal cord. This preparation is dominated by axonal forms of NF-H which are heavily phosphorylated on the multiply repeated NF-H KSP type sequences, and this antibody reacts very strongly with these phosphorylated repeats. Reactivity with non-phosphorylated KSP sequences is orders of magnitude weaker, similar to other characterized antibodies to NF-H. In most species there is some cross-reactivity with the phosphorylated KSP sequences found in the related neurofilament subunit NF-M which are similar but not identical to those of NF-H. The antibody recognizes phosphorylated NF-H strongly in all mammals tested to date and also in chicken.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	32483416
NCBI GeneID	4744
NCBI Accession #	NP_066554.2
NCBI GenBank Nucleotide #	NM_021076.3
UniProt Accession #	P12036; Q96HF8; Q9UJS7; Q9UQ14; B4DYY4
Molecular Weight	112,479 Da
NCBI Official Full Name	neurofilament heavy polypeptide
NCBI Official Synonym Full Names	neurofilament, heavy polypeptide
NCBI Official Symbol	NEFH
NCBI Official Synonym Symbols	NFH
NCBI Protein Information	neurofilament heavy polypeptide; NF-H; 200 kDa neurofilament protein; neurofilament triplet H protein; neurofilament, heavy polypeptide 200kDa
UniProt Protein Name	Neurofilament heavy polypeptide
UniProt Gene Name	NEFH
UniProt Synonym Gene Names	KIAA0845; NFH; NF-H
UniProt Entry Name	NFH_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.