

Goat Anti-NEFM / NF-M Antibody

Peptide-affinity purified goat antibody Catalog # AF2197a

Specification

Goat Anti-NEFM / NF-M Antibody - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E <u>P07197</u> <u>NP_001099011</u>, <u>4741</u>, <u>18040 (mouse)</u>, <u>24588</u> (rat) Mouse Human, Rat, Pig, Dog Goat Polyclonal 100ug/200ul IgG 102472

Goat Anti-NEFM / NF-M Antibody - Additional Information

Gene ID 4741

Other Names Neurofilament medium polypeptide, NF-M, 160 kDa neurofilament protein, Neurofilament 3, Neurofilament triplet M protein, NEFM, NEF3, NFM

Dilution WB~~1:1000 E~~N/A

Format 0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

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

Goat Anti-NEFM / NF-M Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-NEFM / NF-M Antibody - Protein Information

Name NEFM

Synonyms NEF3, NFM



Function

Neurofilaments usually contain three intermediate filament proteins: NEFL, NEFM, and NEFH which are involved in the maintenance of neuronal caliber. May additionally cooperate with the neuronal intermediate filament proteins PRPH and INA to form neuronal filamentous networks (By similarity).

Cellular Location Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P08553}. Cell projection, axon {ECO:0000250|UniProtKB:P08553}

Goat Anti-NEFM / NF-M Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-NEFM / NF-M Antibody - Images



AF2197a (0.03 μ g/ml) staining of Mouse Brain lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-NEFM / NF-M Antibody - 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 medium neurofilament protein. This protein is commonly used as a biomarker of neuronal damage. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

Goat Anti-NEFM / NF-M Antibody - References



Proteome analysis of the thalamus and cerebrospinal fluid reveals glycolysis dysfunction and potential biomarkers candidates for schizophrenia. Martins-de-Souza D, et al. J Psychiatr Res, 2010 May 14. PMID 20471030.

Sex-specific proteome differences in the anterior cingulate cortex of schizophrenia.

Martins-de-Souza D, et al. J Psychiatr Res, 2010 Apr 8. PMID 20381070.

Human variation in alcohol response is influenced by variation in neuronal signaling genes. Joslyn G, et al. Alcohol Clin Exp Res, 2010 May. PMID 20201926.

Alterations in oligodendrocyte proteins, calcium homeostasis and new potential markers in schizophrenia anterior temporal lobe are revealed by shotgun proteome analysis. Martins-de-Souza D, et al. J Neural Transm, 2009 Mar. PMID 19034380.

Association of the dopamine receptor interacting protein gene, NEF3, with early response to antipsychotic medication. Strous RD, et al. Int J Neuropsychopharmacol, 2007 Jun. PMID 16734940.