

## Rabbit Neurofilament heavy polypeptide Polyclonal Antibody | anti-NEFH antibody

Neurofilament heavy polypeptide Antibody

| CATALOG # | HOST   | REACTIVITY                                                                                   | APPLICATIONS                                                 |
|-----------|--------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| AAA328876 | Rabbit | Human, Mouse, Rat<br>Predicted Reactivity: Bovine(100%), Sheep(100%), Rabbit(88%), Dog(100%) | ELISA, Immunocytochemistry, Immunofluorescence, Western Blot |

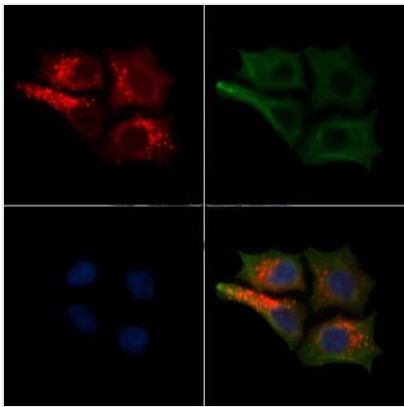
### PRODUCT SYNONYMS

Neurofilament heavy polypeptide; Polyclonal Antibody; Neurofilament heavy polypeptide Antibody; 200 kDa neurofilament protein; CMT2CC; Nefh; Neurofilament heavy polypeptide 200kDa; Neurofilament triplet H protein; NF H; NF-H; NFH; NFH\_HUMAN; anti-NEFH antibody

### PRODUCT SPECIFICATIONS

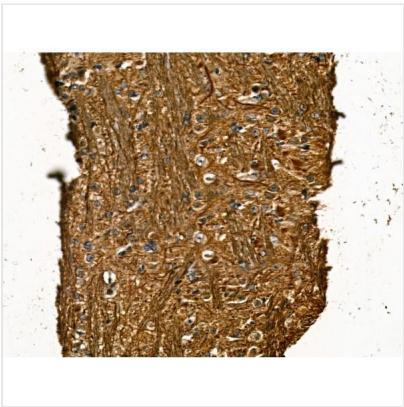
|                                                |                                                                                                                                    |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | Rabbit                                                                                                                             |
| Reactivity                                     | Human, Mouse, Rat<br>Predicted Reactivity: Bovine(100%), Sheep(100%), Rabbit(88%), Dog(100%)                                       |
| Clonality                                      | Polyclonal                                                                                                                         |
| Isotype                                        | IgG                                                                                                                                |
| Specificity                                    | Neurofilament heavy polypeptide Antibody detects endogenous levels of total Neurofilament heavy polypeptide.                       |
| Purity/Purification                            | The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin (Thermo Fisher Scientific).           |
| Form/Format                                    | Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol                            |
| Concentration                                  | 1mg/ml (varies by lot)                                                                                                             |
| Sequence Length                                | 1020                                                                                                                               |
| Applicable Applications for anti-NEFH antibody | ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)                                                       |
| Immunogen                                      | A synthesized peptide derived from human Neurofilament heavy polypeptide, corresponding to a region within N-terminal amino acids. |
| Fragment                                       | Fab fragment                                                                                                                       |
| Preparation and Storage                        | Store at -20 degree C. Stable for 12 months from date of receipt.                                                                  |

IMAGES



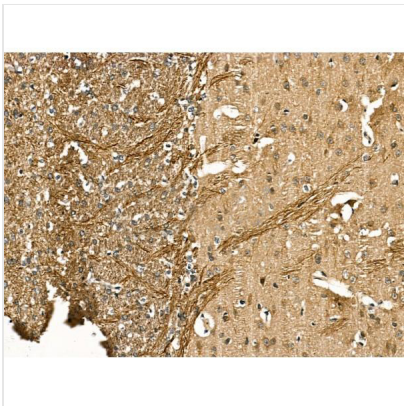
IF (Immunofluorescence)

AAA328876 staining HepG2 cells(30min of 4uM Forskolin treatment) by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25°C. Samples were then incubated with primary Ab(AAA328876) and mouse anti-beta tubulin Ab(T0023) for 1 hour at 37°C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody.The nuclear counter stain is DAPI(blue).



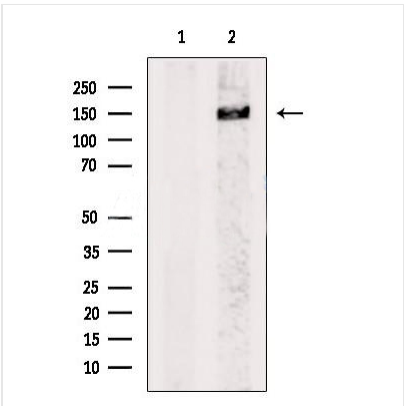
IHC (Immunohistochemistry)

AAA328876 at 1/100 staining Mouse brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

AAA328876 at 1/100 staining Rat brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of extracts from Mouse brain, using Neurofilament heavy polypeptide. The lane on the left was treated with blocking peptide.Observed bands: 150 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-NEFH antibody

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.

Post Translational Modifications: 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.

Subcellular Location: Cytoplasm.

Similarity: Belongs to the intermediate filament family.

NCBI AND UNIPROT INFORMATION

NCBI GI # 32483416

|                                  |                                                                                                       |
|----------------------------------|-------------------------------------------------------------------------------------------------------|
| NCBI GeneID                      | <a href="#">4744</a>                                                                                  |
| NCBI Accession #                 | <a href="#">NP_066554.2</a>                                                                           |
| NCBI GenBank Nucleotide #        | <a href="#">NP_066554.2</a>                                                                           |
| UniProt Accession #              | <a href="#">P12036</a>                                                                                |
| Molecular Weight                 | Observed Molecular Weight: (Observed)112kD, 150kD.<br>Predicted Molecular Weight: (Calculated)112kDa. |
| NCBI Official Full Name          | neurofilament heavy polypeptide                                                                       |
| NCBI Official Synonym Full Names | neurofilament heavy                                                                                   |
| NCBI Official Symbol             | NEFH                                                                                                  |
| NCBI Official Synonym Symbols    | NFH; CMT2CC                                                                                           |
| NCBI Protein Information         | neurofilament heavy polypeptide                                                                       |
| UniProt Protein Name             | Neurofilament heavy polypeptide                                                                       |
| UniProt Gene Name                | <b>NEFH</b>                                                                                           |
| 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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/neurofilament-heavy-polypeptide-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/328876>