



Mouse Monoclonal Antibody **Neurofilament heavy polypeptide** conjugated to Sepharose Beads

CatalogNo: **ANT8159-S**

Size 200ul

Storage Store at 4 °C for frequent use

### Description

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays.

**Neurofilament heavy polypeptide (ANT0051R) Rabbit mAb**

Formulation: 50% slurry in PBS pH 7.2 with 0.01mg NaN<sub>3</sub> preservative.

#### Host Species

- Rabbit

#### MW

- 110kD (Calculated)
- 180-200kD (Observed)

#### Reactivity

- Human, Mouse, Rat,

#### Isotype

- IgG, Kappa

#### Applications

- WB, IHC, IF, IP, ELISA

## Recommended Dilution Ratios

### IP

## Basic Information

Clonality	Monoclonal
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Clone Number	ANT0051R
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## Immunogen Information

**Specificity** Endogenous

## Target Information

**Gene name** NEFH

**Protein Name** Neurofilament heavy polypeptide

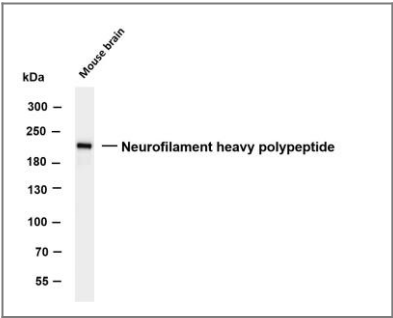
Organism	Gene ID	UniProt ID
Human	<a href="#">4744;</a>	<a href="#">P12036;</a>
Mouse		<a href="#">P19246;</a>

**Cellular Localization** Cytoplasm

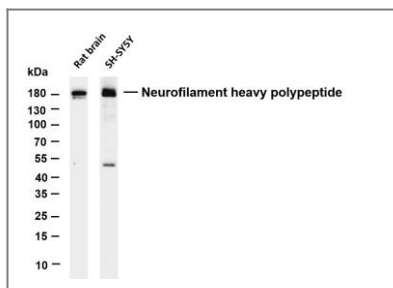
**Tissue specificity** Brain, Eye, Testis,

**Function** Disease: Defects in NEFH are a cause of susceptibility to amyotrophic lateral sclerosis (ALS) [MIM:105400]. ALS is a neurodegenerative disorder affecting upper and lower motor neurons, and resulting in fatal paralysis. Sensory abnormalities are absent. Death usually occurs within 2 to 5 years. The etiology is likely to be multifactorial, involving both genetic and environmental factors. 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. online information: ALS genetic mutations db, polymorphism: The number of repeats is shown to vary between 29 and 30. ANTM: 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 coincident with a change in the neurofilament function. PTM: 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. similarity: Belongs to the intermediate filament family.

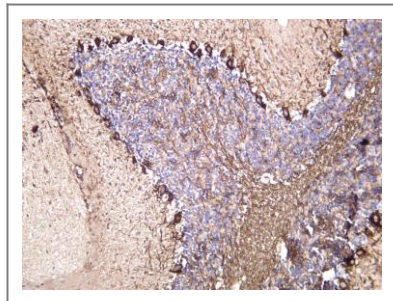
## Validation Data



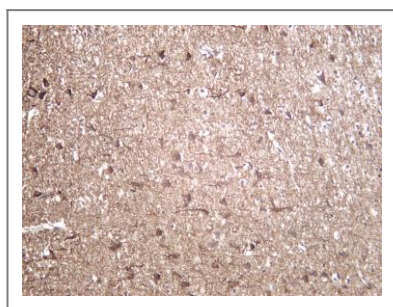
Various whole cell lysates were separated by 4-8% SDS-PAGE, and the membrane was blotted with anti-Neurofilament heavy polypeptide (ANT0051R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Mouse brain Predicted band size: 110kDa Observed band size: 200kDa



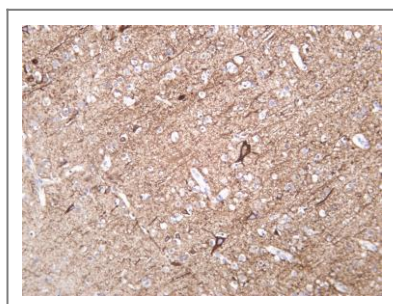
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Neurofilament heavy polypeptide (ANT0051R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Rat brain Lane 2: SH-SY5Y Predicted band size: 110kDa Observed band size: 180kDa



Mouse brain was stained with Anti-Neurofilament heavy polypeptide (ANT0051R) rabbit antibody



Rat brain was stained with Anti-Neurofilament heavy polypeptide (ANT0051R) rabbit antibody



Human brain was stained with Anti-Neurofilament heavy polypeptide (ANT0051R) rabbit antibody

For Research use only, not for diagnostics and clinical use

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