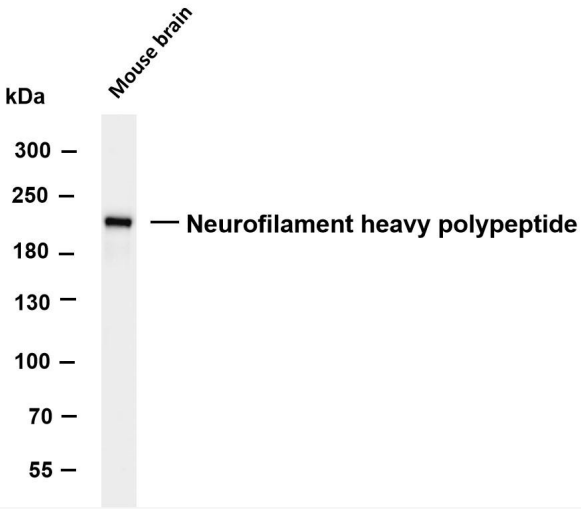
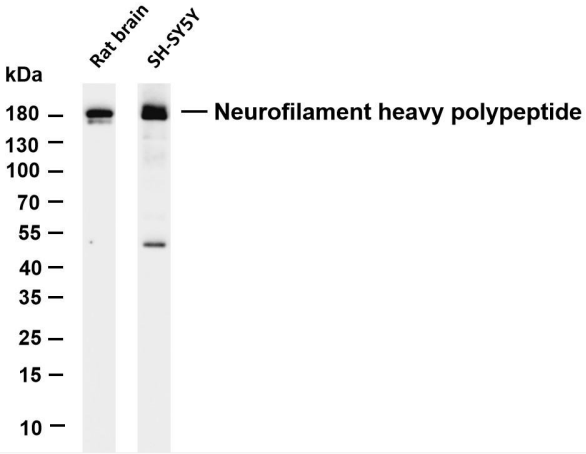
Neurofilament heavy polypeptide Rabbit mAb

Catalog No	YP-rAb-18026
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,ELISA
Gene Name	NEFH
Protein Name	Neurofilament heavy polypeptide
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1:1000; WB 1:1000-1:5000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	NEFH ; KIAA0845 ; NFH ; Neurofilament heavy polypeptide ; NF-H ; 200 kDa neurofilament protein ; Neurofilament triplet H protein
Observed Band	180-200kD
Calculated Molecular Weight	110kD
Cell Pathway	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.,PTM:Phosphorylation seems to play a major role in the functioning of the larger neurofilament polypeptides (NF-M and NF-H), the levels of phosphorylation

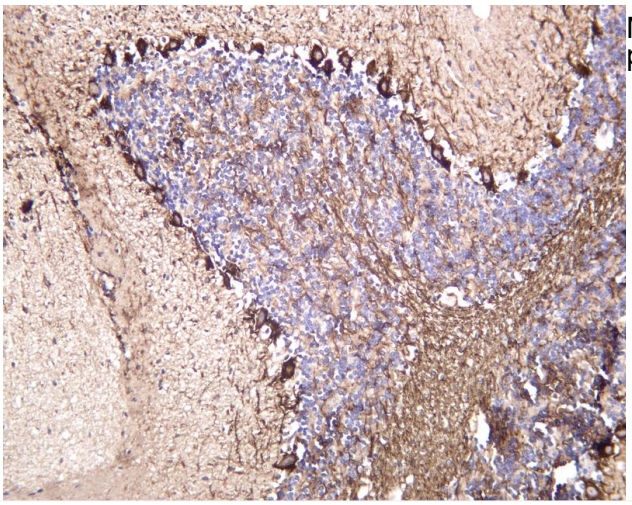
	being altered developmentally and coincident with a change in the neurofilament function.,PTM:There are a number of repeats of the tripeptide K-S-P, NFH is phosphorylated on a number of the serines in this motif. It is thought that phosphorylation of NFH results in the formation of interfilament cross bridges that are important in the maintenance of axonal caliber.,similarity:Belongs to the intermediate filament family.,
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 heavy neurofilament protein. This protein is commonly used as a biomarker of neuronal damage and susceptibility to amyotrophic lateral sclerosis (ALS) has been associated with mutations in this gene. [provided by RefSeq, Oct 2008],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



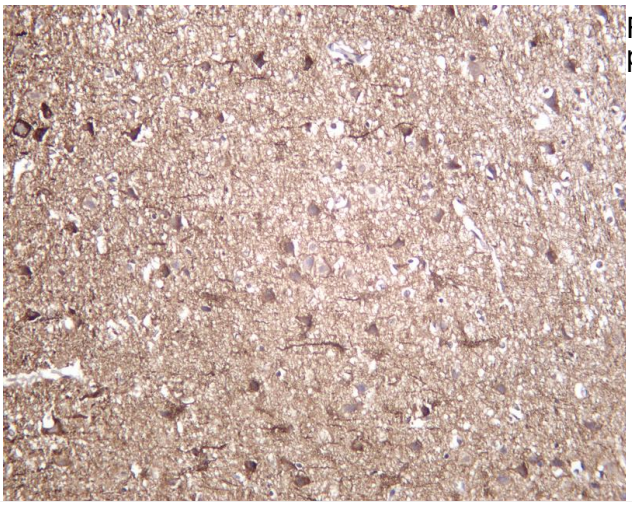
Various whole cell lysates were separated by 4-8% SDS-PAGE, and the membrane was blotted with anti-Neurofilament heavy polypeptide antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Mouse brain Predicted band size: 110kDa Observed band size: 200kDa



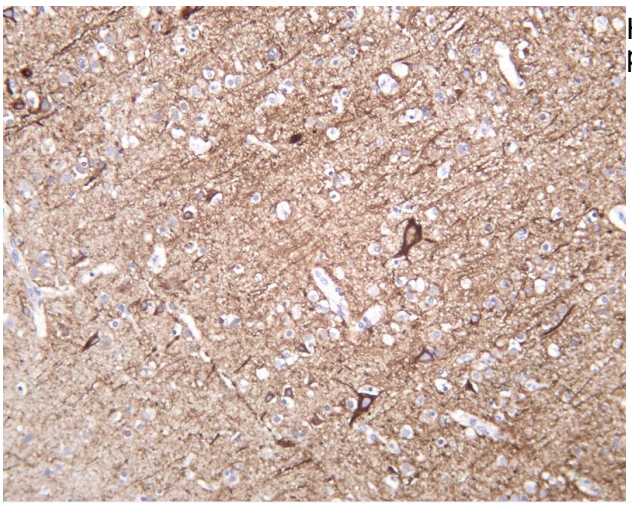
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Neurofilament heavy polypeptide antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Rat brain Lane 2: SH-SY5Y Predicted band size: 110kDa Observed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



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



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



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