

Product datasheet

Anti-Neurofilament heavy polypeptide antibody ab72996

★★★★★ 1 Abreviews 14 References 1 Image

Overview

Product name	Anti-Neurofilament heavy polypeptide antibody
Description	Chicken polyclonal to Neurofilament heavy polypeptide
Host species	Chicken
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Chicken, Cow, Human
Immunogen	Full length native protein (purified) corresponding to Cow Neurofilament heavy polypeptide.
Positive control	Rat cerebral cortex lysate. Rat cortical neurons and glia.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	Preservative: 0.065% Sodium azide Constituent: Tissue culture supernatant
Purity	IgY fraction
Clonality	Polyclonal
Isotype	IgY

Applications

Our [Abpromise guarantee](#) covers the use of **ab72996** in the following tested applications.

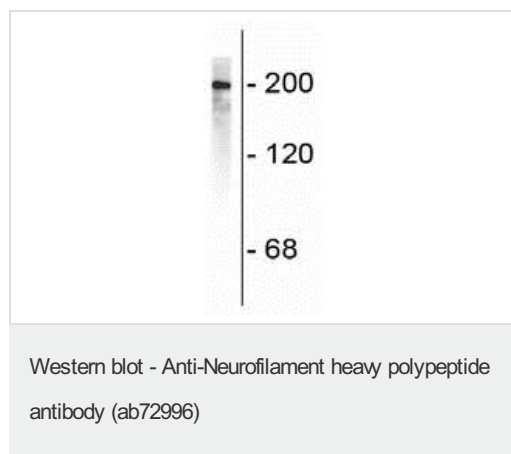
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/50000. Detects a band of approximately 200 kDa (predicted molecular weight: 115 kDa).
ICC/IF	★★★★★	1/25000.

Target

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.
Involvement in 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.
Sequence similarities	Belongs to the intermediate filament family.
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 coincident with a change in the neurofilament function. Phosphorylated in the Head and Rod regions by the PKC kinase PKN1, leading to inhibit polymerization.

Images



Anti-Neurofilament heavy polypeptide antibody (ab72996) at 1/50000 dilution + Rat cerebral cortex lysate

Predicted band size: 115 kDa

Observed band size: 200 kDa

[why is the actual band size different from the predicted?](#)

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