# abcam

# Product datasheet

# Anti-Neurofilament heavy polypeptide antibody ab72996

\*\*\*\* 1 Abreviews 33 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 Species reactivity Reacts with: Rat

**Immunogen** Full length native protein (purified) corresponding to Cow Neurofilament heavy polypeptide.

**General notes** 

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### **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 lgY fraction

Clonality Polyclonal

**Isotype** IgY

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab72996 in the following tested applications.

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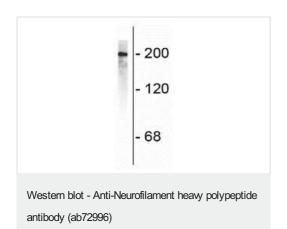
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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

# **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

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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