

Anti-Neurofilament heavy polypeptide antibody [3G3] ab19386

5 References 4 图像

概述	
产品名称	Anti-Neurofilament heavy polypeptide抗体[3G3]
描述	小鼠单克隆抗体[3G3] to Neurofilament heavy polypeptide
宿主	Mouse
经测试应用	适用于: ICC/IF, IHC-P, WB
种属反应性	与反应: Rat, Human
免疫原	Synthetic peptide corresponding to Neurofilament heavy polypeptide aa 1-226 (C terminal).
阳性对照	ICC: Rat brain microsome. WB: SH-SY5Y cells, rat brain lysates. IHC-P: Rat and human brain tissue.
常规说明	<p>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.</p> <p>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&amp;As</p>
性能	
形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	Preservative: 0.05% Sodium azide Constituents: PBS, 0.1% BSA
纯度	Protein G purified
克隆	单克隆
克隆编号	3G3
同种型	IgG
应用	

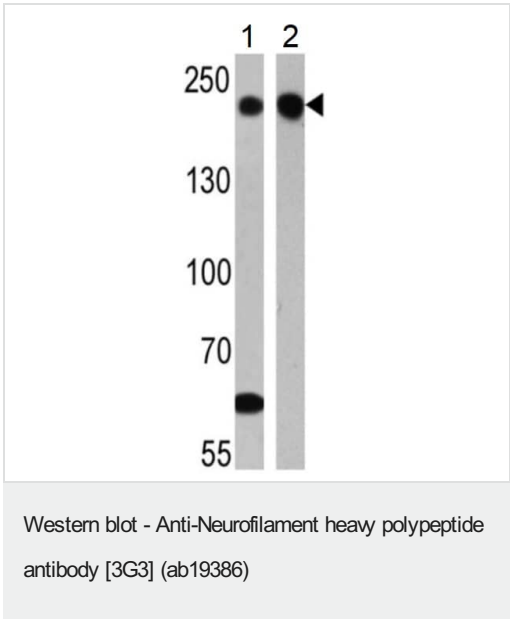
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		Use a concentration of 5 µg/ml.
IHC-P		1/10 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/100 - 1/1000. Predicted molecular weight: 112 kDa.

靶标

功能	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.
疾病相关	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.
序列相似性	Belongs to the intermediate filament family.
翻译后修饰	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.

图片



**All lanes :** Anti-Neurofilament heavy polypeptide antibody [3G3] (ab19386) at 1/500 dilution

**Lane 1 :** SH-SY5Y (human neuroblastoma cell line from bone marrow) whole cell lysate

**Lane 2 :** Rat brain tissue lysates

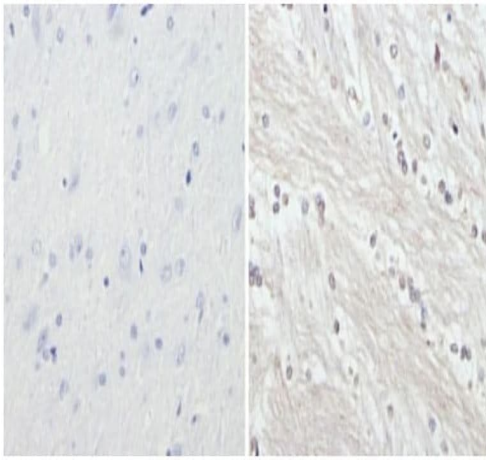
Lysates/proteins at 25 µg per lane.

Secondary

**All lanes :** HRP-conjugated secondary antibody

**Predicted band size:** 112 kDa

Results show a band at ~200 kDa.



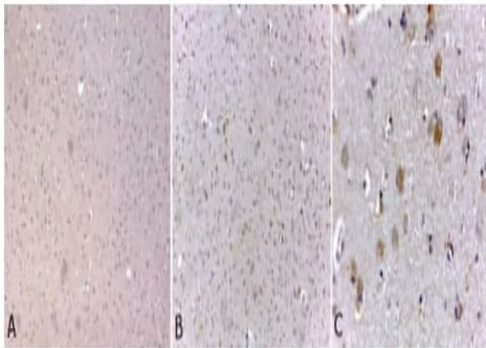
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurofilament heavy polypeptide antibody [3G3] (ab19386)

Immunohistochemistry analysis of paraffin-embedded rat brain tissue (right) compared to a negative control without primary antibody (left) labelling Neurofilament Heavy Chain with ab19386.

Positive staining in the cytoplasm and nucleus (right).

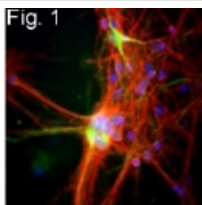
To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H<sub>2</sub>O<sub>2</sub>-methanol for 15 min at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with a Neurofilament Heavy Chain monoclonal antibody diluted in 3% BSA-PBS at 1/20 dilution overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit.

Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurofilament heavy polypeptide antibody [3G3] (ab19386)

Immunohistochemistry analysis of Neurofilament, Heavy chain showing staining in the cytoplasm and axons of formalin-fixed, paraffin-embedded human brain tissue (B) and magnified section (C) compared with an isotype control (A). To expose target proteins, antigen retrieval was performed using HEIR with a buffer (pH 6.2). Tissues were probed with a Neurofilament, Heavy chain monoclonal antibody for 60 minutes at a dilution of 2 µg/mL and detection was performed using an HRP-conjugated detection system for 30 minutes followed by DAB staining.



Immunofluorescence of neurofilament, heavy chain in rat cerebral cortex cultures in green.

Immunocytochemistry/ Immunofluorescence - Anti-Neurofilament heavy polypeptide antibody [3G3] (ab19386)

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