

Anti-Neurofilament heavy polypeptide antibody [3G3] ab19386

5 References [画像数 4](#)

製品の概要

製品名	Anti-Neurofilament heavy polypeptide antibody [3G3]
製品の詳細	Mouse monoclonal [3G3] to Neurofilament heavy polypeptide
由来種	Mouse
アプリケーション	適用あり: ICC/IF, IHC-P, WB
種交差性	交差種: Rat, Human
免疫原	Synthetic peptide corresponding to Neurofilament heavy polypeptide aa 1-226 (C terminal).
ポジティブ・コントロール	ICC: Rat brain microsome. WB: SH-SY5Y cells, rat brain lysates. IHC-P: Rat and human brain tissue.
特記事項	<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&As</p>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
バッファー	Preservative: 0.05% Sodium azide Constituents: PBS, 0.1% BSA
精製度	Protein G purified
ポリ/モノ	モノクローナル
クローン名	3G3
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee

Abpromise保証は、次のテスト済みアプリケーションにおけるab19386の使用に適用されます

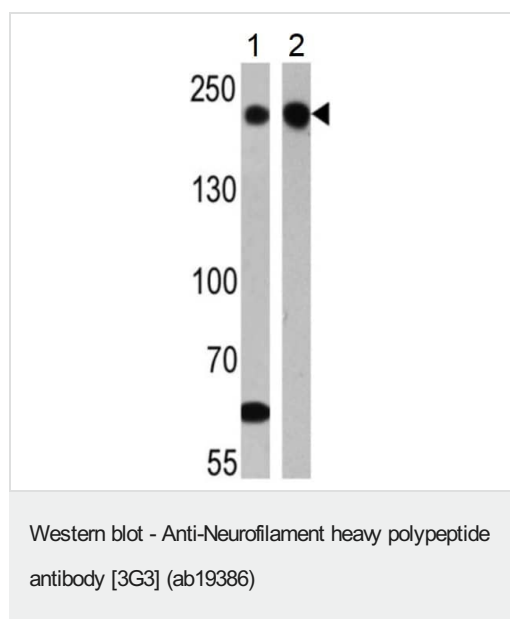
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご確認ください。

アプリケーション	Abreviews	特記事項
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.

ターゲット情報

機能	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.
関連疾患	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.
配列類似性	Belongs to the intermediate filament family.
翻訳後修飾	<p>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.</p> <p>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.</p> <p>Phosphorylated in the Head and Rod regions by the PKC kinase PKN1, leading to inhibit polymerization.</p>

画像



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

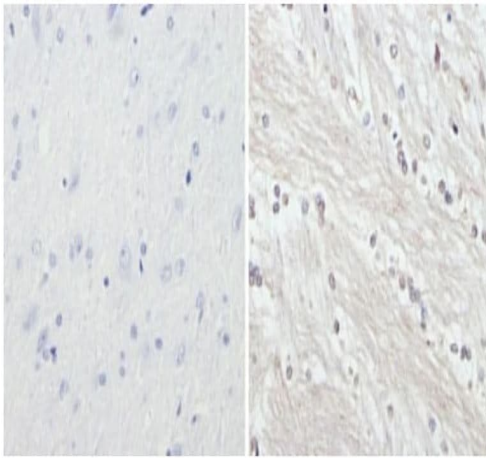
Lysates/proteins at 25 µg per lane.

Secondary

All lanes : HRP-conjugated secondary antibody

Predicted band size: 112 kDa

Results show a band at ~200 kDa.



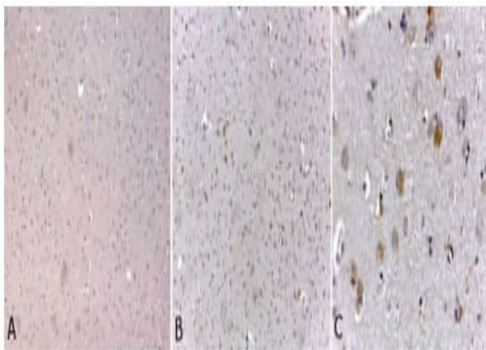
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Neurofilament heavy polypeptide antibody [3G3] (ab19386)

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).

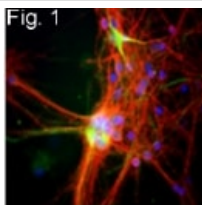
To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H₂O₂-methanol for 15 min at room temperature, washed with ddH₂O and PBS, and then probed with a Neurofilament Heavy Chain monoclonal 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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