# abcam

## Product datasheet

## Anti-Neurofascin antibody ab31457

★★★★★ 4 Abreviews 23 References 3 图像

概述

产品名称 Anti-Neurofascin抗体

描述 兔多克隆抗体to Neurofascin

**宿主** Rabbit

特异性 The ab31457 antibody would be able to bind to the full length canonical sequence Isoform 1 and

also to Isoforms 5, Isoform 6, Isoform 9 and Isoform 13.

The antibody would not be able to detect Isoforms 2, 3, 4, 7, 8, 10, 11 or Isoform 12. All of these

Isoforms are missing amino acids 1035-1203.

经测试应用 适用于: WB, ICC/IF, IHC-FoFr, IHC-P

**种属反应性 与反应:** Mouse, Rat, Human, Common marmoset

免疫原 Synthetic peptide corresponding to Mouse Neurofascin aa 1150 to the C-terminus conjugated to

keyhole limpet haemocyanin. Database link: **Q810U3** 

(Peptide available as ab33377)

常规说明

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

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

**存储溶液** pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

1

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

纯**度** Immunogen affinity purified

ΙgG

**克隆** 多克隆

同种型

## 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab31457于以下的经测试应用

"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
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 155,186 kDa (predicted molecular weight: 138 kDa).
ICC/IF		Use a concentration of 1 µg/ml.
IHC-FoFr	<b>★★★★☆ (1)</b>	1/1000.
IHC-P	★★★★☆ (3)	Use at an assay dependent concentration.

靶标

功能 Cell adhesion, ankyrin-binding protein which may be involved in neurite extension, axonal

guidance, synaptogenesis, myelination and neuron-glial cell interactions.

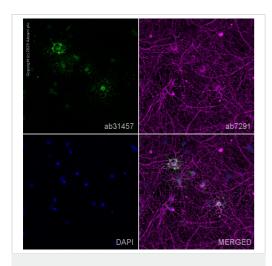
序列相似性 Belongs to the immunoglobulin superfamily. L1/neurofascin/NgCAM family.

Contains 5 fibronectin type-III domains.

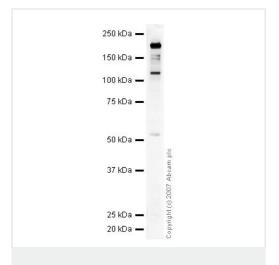
Contains 6 lg-like C2-type (immunoglobulin-like) domains.

细**胞定位** Cell membrane.

图片



Immunocytochemistry/ Immunofluorescence - Anti-Neurofascin antibody (ab31457)



Western blot - Anti-Neurofascin antibody (ab31457)

ab31457 staining Neurofascin in Rat Primary Neurons DIV14 cells. The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab31457 at 1µg/ml and ab7291, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with ab150081, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor<sup>®</sup> 488), pre-adsorbed at 1/1000 dilution (shown in green) and ab150120, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor<sup>®</sup> 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour magenta). Nuclear DNA was labelled with DAPI (shown in blue). Image was acquired with a confocal microscope (Leica-Microsystems TCS SP8) and a single confocal section is shown.

Anti-Neurofascin antibody (ab31457) at 1 µg/ml + Brain(Mouse)Whole Cell Lysate at 10 µg

### Secondary

IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

Performed under reducing conditions.

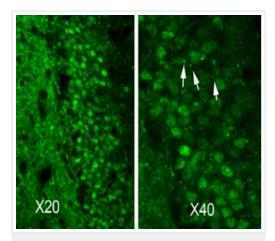
**Predicted band size:** 138 kDa **Observed band size:** 155,186 kDa

Additional bands at: 120 kDa, 55 kDa. We are unsure as to the

identity of these extra bands.

In Rat, Neurofascin has three observed isoforms, isoform 1 (138 kDa) which is known as Nfasc186, isoform 2 (133 kDa) and isoform 3 (132 kDa) which are both known as Nfasc155. These proteins are highly glycosylated and their observed molecular weight in Western blot is 186 kDa and 155 kDa respectively.

Mouse Neurofascin has a predicted molecular weight of 138 kDa (Swiss-Prot data) however the observed bands at 186 kDa and 155 kDa are thought to correspond to the glycosylated isoforms 1, 2 and 3 as observed in Rat (Sherman DL et al, 2005, PubMed: 16337912)



Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-Neurofascin antibody (ab31457)

This image is courtesy of Sophie Pezet, CNRS, Paris, France

Immunohistochemistical detection of Neurofascin using antibody ab31457 on PFA perfusion-fixed rat brain sections. Primary antibody ab31457 was used at 1/1000 incubated for 18 hours @ 20°C in PBS + 0.3 % Triton X100. Secondary antibody: goat antirabbit Alexa Fluor 488 conjugated (1/1000). Immunostaining obtained in the rat hippocampus using this antibody diluted 1:1000. Sections come from a perfused-fixed animal. The immunostaining was performed using the `free floating` technique, using direct fluorescence. Some cytoplasmic staining was observed in granular neurons and neuronal processes (arrows on the figure on the right). The lefthand figure shows the hippocampal granular cell staining (objective X20), the righthand figure shows this at higher magnification. This staining is consistent with published observation of cytoplasmic localisation of Neurofascin in the cytoplasm of hippocampal cells and their axon initial segment (Burkarth

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

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