# abcam

# Product datasheet

# Anti-NG2 antibody ab83178

★★★★★ 3 Abreviews 16 References 2 图像

#### 概述

产品名称 Anti-NG2抗体

描述 兔多克隆抗体to NG2

**宿主** Rabbit

特异性 From Jan 2024, QC testing of replenishment batches of this polyclonal changed. All tested and

expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch,

please contact our Scientific Support who will be happy to help.

经测试应用 **适用于:** IHC-FoFr, WB **种属反应性 与反**应: Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

(Peptide available as ab96112)

阳性对照 WB: Human skin lysate; IHC-FoFr: Rat cortex.

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

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.

1

纯**度** Immunogen affinity purified

**克隆** 多克隆

**同种型** IgG

#### 应用

# The Abpromise guarantee Abpromise™承诺保证使用ab83178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
IHC-FoFr	*****(1)	Use at an assay dependent concentration.
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 300 kDa (predicted molecular weight: 251 kDa).

#### 靶标

#### 功能

Proteoglycan playing a role in cell proliferation and migration which stimulates endothelial cells motility during microvascular morphogenesis. May also inhibit neurite outgrowth and growth cone collapse during axon regeneration. Cell surface receptor for collagen alpha 2(VI) which may confer cells ability to migrate on that substrate. Binds through its extracellular N-terminus growth factors, extracellular matrix proteases modulating their activity. May regulate MPP16-dependent degradation and invasion of type I collagen participating in melanoma cells invasion properties. May modulate the plasminogen system by enhancing plasminogen activation and inhibiting angiostatin. Functions also as a signal transducing protein by binding through its cytoplasmic C-terminus scaffolding and signaling proteins. May promote retraction fiber formation and cell polarization through Rho GTPase activation. May stimulate alpha-4, beta-1 integrin-mediated adhesion and spreading by recruiting and activating a signaling cascade through CDC42, ACK1 and BCAR1. May activate FAK and ERK1/ERK2 signaling cascades.

组织特异性 Detected only in malignant melanoma cells.

序列相似性 Contains 15 CSPG (NG2) repeats.

Contains 2 laminin G-like domains.

翻译后修饰 O-glycosylated; contains glycosaminoglycan chondroitin sulfate which are required for proper

localization and function in stress fiber formation (By similarity). Involved in interaction with

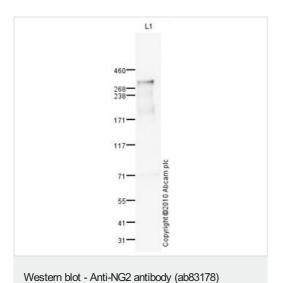
MMP16 and ITGA4.

Phosphorylation by PRKCA regulates its subcellular location and function in cell motility.

细胞定位 Apical cell membrane. Cell projection > lamellipodium membrane. Localized at the apical plasma

membrane it relocalizes to the lamellipodia of astrocytoma upon phosphorylation by PRKCA. Localizes to the retraction fibers. Localizes to the plasma membrane of oligodendrocytes.

# 图片



Anti-NG2 antibody (ab83178) at 1  $\mu$ g/ml + Human skin tissue lysate - total protein (**ab30166**) at 10  $\mu$ g

#### Secondary

Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

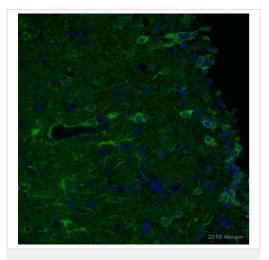
**Predicted band size:** 251 kDa **Observed band size:** 300 kDa

Additional bands at: 190 kDa. We are unsure as to the identity of

these extra bands.

Exposure time: 3 minutes

Human Chondroitin sulfate proteoglycan 4 precursor (NG2) contains a number of potential glycosylation sites (SwissProt) which may explain its migration at a higher molecular weight than predicted.



Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-NG2 antibody (ab83178)

This image is courtesy of an abreview submitted by Ruma Raha-Chowdhury, University Of Cambridge, United Kingdom

IHC-FoFr image of NG2 staining on sections of rat cortex post injury using ab83178 (1:100). The brain was perfusion fixed using 4% PFA and the sections were permeabilized using 0.1% TritonX in 0.1% PBS. The sections were then blocked using 10% donkey serum for 1hour at 24°C. ab83178 was diluted 1:100 and incubated with the sections for 24 hours at 4°C. The secondary antibody used was donkey polyclonal to rabbit IgG conjugated to Alexa Fluor 488 (1:1000).

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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.cn/abpromise">https://www.abcam.cn/abpromise</a> or contact our technical team.

# Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors