# abcam

# Product datasheet

# Anti-NG2 antibody ab83178

★★★★★ 3 Abreviews 16 References 画像数 2

#### 製品の概要

製品名 Anti-NG2 antibody

製品の詳細 Rabbit polyclonal to NG2

由来種 Rabbit

特異性 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.

アプリケーション 適用あり: IHC-FoFr, WB

種交差性 交差種: Rat, Human

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

(Peptide available as ab96112)

ポジティブ・コントロール WB: Human skin lysate; IHC-FoFr: Rat cortex.

特記事項
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

### 製品の特性

製品の状態 Liqui

保存方法 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.

**バッファー** 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

scientific support team who will be happy to help.

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精製度 Immunogen affinity purified

**ポリ/モノ** ポリクローナル

アイソタイプ lgG

# アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab83178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検討ください。

アプリケーション	Abreviews	特記事項
IHC-FoFr	**** <u>(1)</u>	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).

#### ターゲット情報

機能

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.

組織特異性 Detected only in malignant melanoma cells.

**配列類似性** Contains 15 CSPG (NG2) repeats.

Contains 2 laminin G-like domains.

翻訳後修飾 O-glycosylated; contains glycosaminoglycan chondroitin sulfate which are required for proper

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

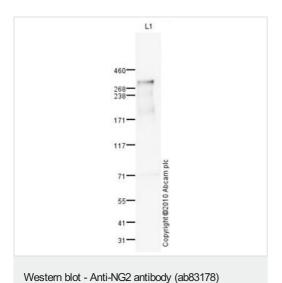
MMP16 and ITGA4.

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

細胞内局在 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.

#### 画像



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.

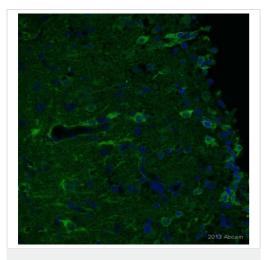
**Predicted band size:** 251 kDa **Observed band size:** 300 kDa

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"

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