# abcam

## Product datasheet

## Anti-NG2 antibody [EPR20244] ab183929



★★★★★ 2 Abreviews 1 References 6 图像

### 概述

产品名称 Anti-NG2抗体[EPR20244]

描述 兔单克隆抗体[EPR20244] to NG2

宿主 Rabbit

经测试应用 适用于: WB, ICC/IF, IHC-P

种属反应性 与反应: Human

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: A-375 and MeWo whole cell lysates; Human skin lysate. IHC-P: Human melanoma and

glioma tissues. ICC/IF: A-375 and MeWo cells.

常规说明 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information **see here**.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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 long

term. Avoid freeze / thaw cycle.

存储溶液 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 0.05% BSA, 40% Glycerol, PBS

纯度 Protein A purified

单克隆 克隆

克隆编号 EPR20244

同种型 ΙgG

#### The Abpromise quarantee

#### Abpromise™承诺保证使用ab183929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		1/1000. Predicted molecular weight: 251 kDa.
ICC/IF		1/100.
IHC-P	<b>★★★★</b> (1)	1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

#### 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

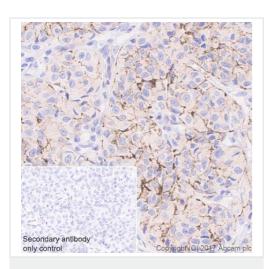
O-glycosylated; contains glycosaminoglycan chondroitin sulfate which are required for proper localization and function in stress fiber formation (By similarity). Involved in interaction with MMP16 and ITGA4.

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



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-NG2 antibody
[EPR20244] (ab183929)

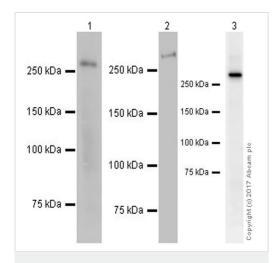
Immunohistochemical analysis of paraffin-embedded human melanoma tissue labeling NG2 with ab183929 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Membranous and weak cytoplasmic staining on tumor cells of human melanoma (PMID: 24258997). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary

antibody, Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-NG2 antibody [EPR20244] (ab183929)

**All lanes :** Anti-NG2 antibody [EPR20244] (ab183929) at 1/1000 dilution

**Lane 1 :** A-375 (human malignant melanoma cell line), whole cell lysate

Lane 2: Human skin lysate

Lane 3 : MeWo (human malignant melanoma cell line), whole cell lysate

Lysates/proteins at 20 µg per lane.

## **Secondary**

Lanes 1 & 3 : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000 dilution

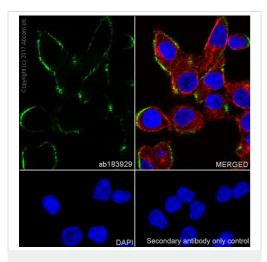
Lane 2 : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Developed using the ECL technique.

Predicted band size: 251 kDa Observed band size: 270 kDa **Exposure times:** Lanes 1,3: 1 minute; Lane 2: 3 minutes.

Blocking/Dilution buffer: 5% NFDM/TBST.

This image of lane 3 was performed on a BIO-RAD® ChemiDoc™ MP instrument.

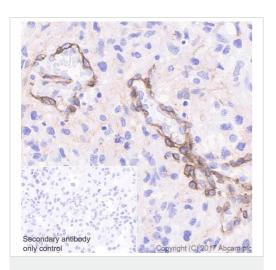


Immunocytochemistry/ Immunofluorescence - Anti-NG2 antibody [EPR20244] (ab183929)

Immunofluorescent analysis of 100% methanol-fixed A-375 (human malignant melanoma cell line) cells labeling NG2 with ab183929 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing membrane staining on A-375 cell line.

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) (ab195889) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (Alexa Fluor<sup>®</sup> 488) (ab150077) secondary antibody at 1/1000 dilution.

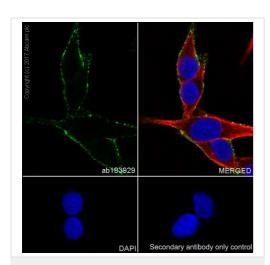


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-NG2 antibody
[EPR20244] (ab183929)

Immunohistochemical analysis of paraffin-embedded human glioma tissue labeling NG2 with ab183929 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Membranous staining on blood vessels of human glioma (PMID: 24386429). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-NG2 antibody [EPR20244] (ab183929)

Immunofluorescent analysis of 100% methanol-fixed MeWo (human malignant melanoma cell line) cells labeling NG2 with ab183929 at 1/100 dilution, followed by Goat Anti-Rabbit lgG H&L (Alexa Fluor<sup>®</sup> 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing membrane staining on MeWo cell line.

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) (ab195889) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (Alexa Fluor<sup>®</sup> 488) (ab150077) secondary antibody at 1/1000 dilution.



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