

Product datasheet

Anti-NG2 antibody [132.38] - BSA and Azide free ab177025

[1 Image](#)

Overview

Product name	Anti-NG2 antibody [132.38] - BSA and Azide free
Description	Mouse monoclonal [132.38] to NG2 - BSA and Azide free
Host species	Mouse
Tested applications	Suitable for: WB, IP, ELISA, IHC-FoFr, IHC-Fr
Species reactivity	Reacts with: Rat Does not react with: Mouse
Immunogen	Tissue, cells or virus corresponding to NG2.
Positive control	WB: Rat brain, spinal cord and hippocampus tissue lysate.
General notes	<p>ab177025 is a PBS-only buffer format of ab50009.</p> <p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>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, as well as customer reviews and Q&As.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	Constituent: PBS
Carrier free	Yes
Purity	IgG fraction
Clonality	Monoclonal
Clone number	132.38
Isotype	IgG1

Applications

Our [Abpromise guarantee](#) covers the use of **ab177025** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 5 µg/ml. Predicted molecular weight: 251 kDa. Abcam recommends using BSA as the blocking agent.
IP		Use at an assay dependent concentration.
ELISA		Use at an assay dependent concentration.
IHC-FoFr		Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration.

Target

Function	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.
Tissue specificity	Detected only in malignant melanoma cells.
Sequence similarities	Contains 15 CSPG (NG2) repeats.

Contains 2 laminin G-like domains.

Post-translational modifications

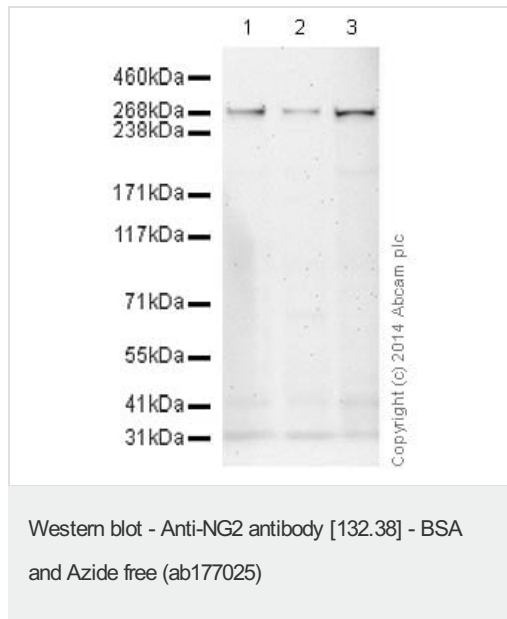
O-glycosylated; contains glycosaminoglycan chondroitin sulfate which are required for proper localization and function in stress fiber formation (By similarity). Involved in interaction with MMP16 and ITGA4.

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

Cellular localization

Apical cell membrane. Cell projection > lamellipodium membrane. Localized at the apical plasma membrane it relocates to the lamellipodia of astrocytoma upon phosphorylation by PRKCA. Localizes to the retraction fibers. Localizes to the plasma membrane of oligodendrocytes.

Images



All lanes : Anti-NG2 antibody [132.38] ([ab50009](#)) at 1 µg/ml

Lane 1 : Rat brain tissue lysate

Lane 2 : Rat spinal cord tissue lysate

Lane 3 : Rat hippocampus tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Mouse IgG H&L (HRP) preadsorbed ([ab97040](#)) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 251 kDa

Observed band size: 270 kDa

[why is the actual band size different from the predicted?](#)

Exposure time: 20 minutes

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

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