abcam

Product datasheet

Anti-N Cadherin antibody - Intercellular Junction Marker ab18203

47 Abreviews 758 References 11 Images

Overview

Product name	Anti-N Cadherin antibody - Intercellular Junction Marker
Description	Rabbit polyclonal to N Cadherin - Intercellular Junction Marker
Host species	Rabbit
Specificity	Replenishment batches of our polyclonal antibody, ab18203 are tested in WB. Previous batches were additionally validated in ICC/IF, IHC-P and IP. These applications are still expected to work and are covered by our Abpromise guarantee. You may also be interested in our alternative recombinant antibody, **ab76011**.
Tested applications	**Suitable for:** WB, IHC-P, IP, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human **Predicted to work with:** Chicken, Cow, Pig, Xenopus laevis
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
General notes	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

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	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.

Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab18203 in the following tested applications.

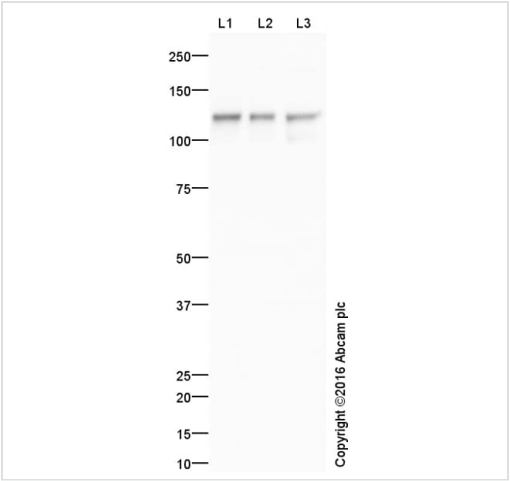
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★☆ (8)	Use a concentration of 1 µg/ml. Detects a band of approximately 125-135 kDa (predicted molecular weight: 100 kDa).
IHC-P	★★★★★ (13)	Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
IP		Use at an assay dependent concentration.
ICC/IF	★★★★☆ (7)	Use a concentration of 5 µg/ml.

Target

Function	Cadherins are calcium dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types. CDH2 may be involved in neuronal recognition mechanism. In hippocampal neurons, may regulate dendritic spine density.
Sequence similarities	Contains 5 cadherin domains.
Cellular localization	Cell membrane.

Images



Western blot - Anti-N Cadherin antibody - Intercellular Junction Marker (ab18203)

All lanes : Anti-N Cadherin antibody - Intercellular Junction Marker (ab18203) at 1 µg/ml

Lane 1 : Brain (Rat) Tissue Lysate at 10 µg
Lane 2 : Brain (Mouse) Tissue Lysate at 10 µg
Lane 3 : Brain (Human) Tissue Lysate at 20 µg

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed at 1/50000 dilution

Developed using the ECL technique.

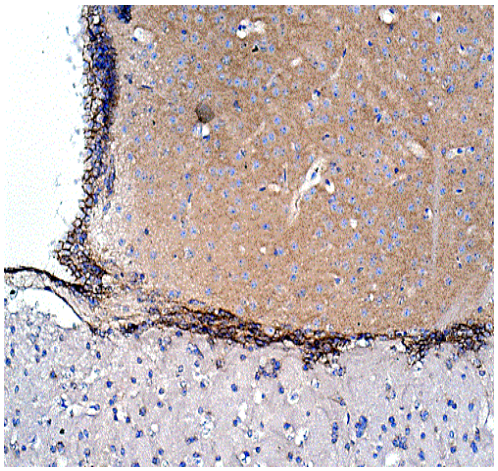
Performed under reducing conditions.

Predicted band size: 100 kDa
Observed band size: 125 kDa

Exposure time: 1 minute

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab18203 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution **ab133406**.

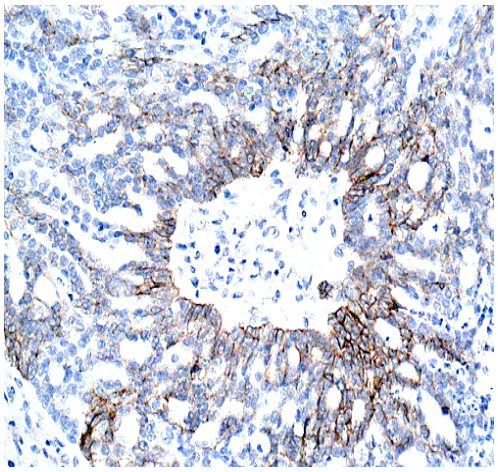
The N Cadherin protein has a predicted molecular weight of 100 kDa, however it is extensively glycosylated and has been shown to run in the 125-135 kDa region (SwissProt data).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N Cadherin antibody - Intercellular Junction Marker (ab18203)

Image courtesy of Mr Carl Hobbs, Kings College London.

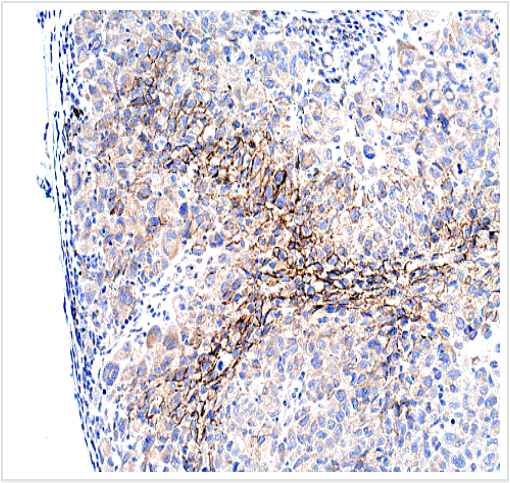
Anti N-cadherin (ab18203) staining of mouse brain using immunohistochemistry (formaldehyde-fixed, paraffin-embedded sections). Heat-mediated antigen retrieval was carried out using citric acid. Samples were incubated with primary antibody (1/1000) for two hours at room temperature. A biotin-conjugated goat anti-rabbit IgG polyclonal was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N Cadherin antibody - Intercellular Junction Marker (ab18203)

Image courtesy of Mr Carl Hobbs, Kings College London.

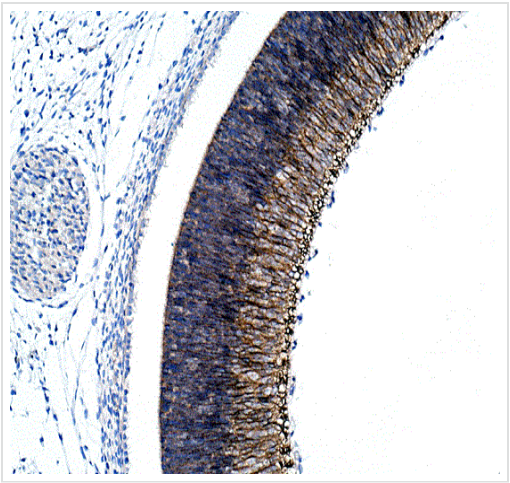
Anti N-cadherin (ab18203) staining of human ovarian cancer tissue using immunohistochemistry (formaldehyde-fixed, paraffin-embedded sections). Heat-mediated antigen retrieval was carried out using citric acid. Samples were incubated with primary antibody (1/1000) for two hours at room temperature. A biotin-conjugated goat anti-rabbit IgG polyclonal was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N Cadherin antibody - Intercellular Junction Marker (ab18203)

Image courtesy of Mr Carl Hobbs, Kings College London.

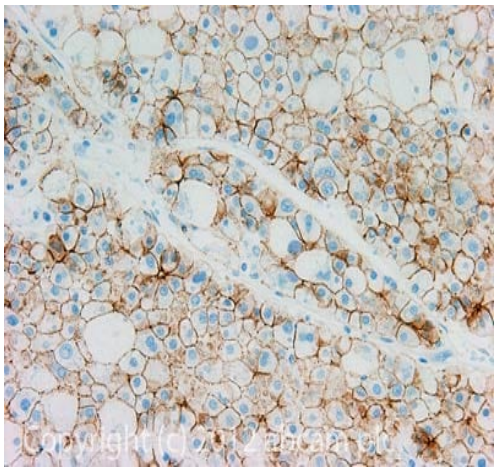
Anti N-cadherin (ab18203) staining in a human melanoma xenograft mouse model using immunohistochemistry (formaldehyde-fixed, paraffin-embedded sections). Heat-mediated antigen retrieval was carried out using citric acid. Samples were incubated with primary antibody (1/1000) for two hours at room temperature. A biotin-conjugated goat anti-rabbit IgG polyclonal was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N Cadherin antibody - Intercellular Junction Marker (ab18203)

Image courtesy of Mr Carl Hobbs, Kings College London.

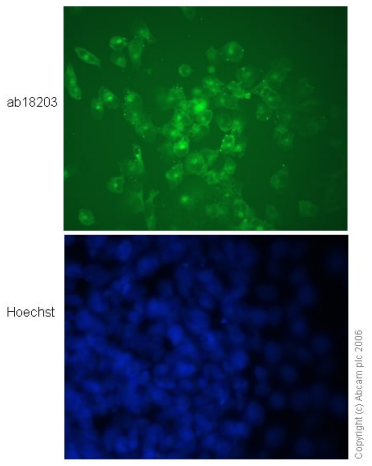
Anti N-cadherin (ab18203) staining of E17 developing rat retina using immunohistochemistry (formaldehyde-fixed, paraffin-embedded sections). Heat-mediated antigen retrieval was carried out using citric acid. Samples were incubated with primary antibody (1/1000) for two hours at room temperature. A biotin-conjugated goat anti-rabbit IgG polyclonal was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N Cadherin antibody - Intercellular Junction Marker (ab18203)

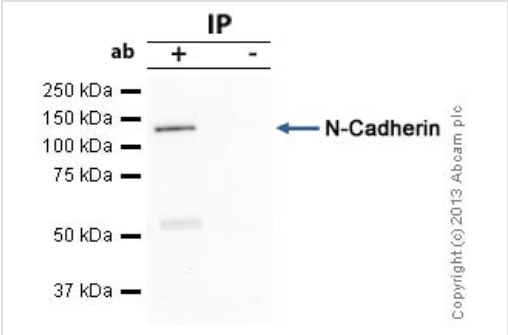
IHC image of N Cadherin staining in Human liver cancer formalin fixed paraffin embedded tissue section, performed on a Leica BondTM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab18203, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



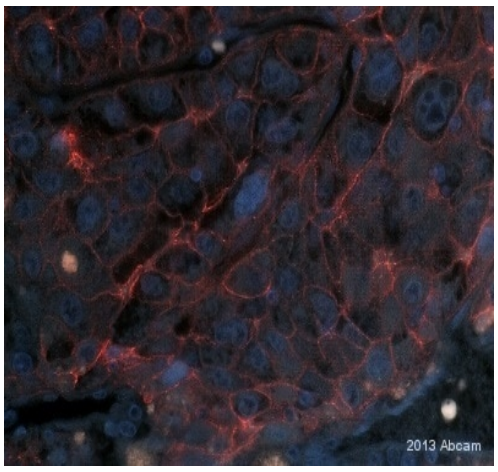
Immunocytochemistry/ Immunofluorescence - Anti-N Cadherin antibody - Intercellular Junction Marker (ab18203)

Anti-N Cadherin antibody - Intercellular Junction Marker (ab18203) stained human embryonic stem cells differentiated into mesoderm.



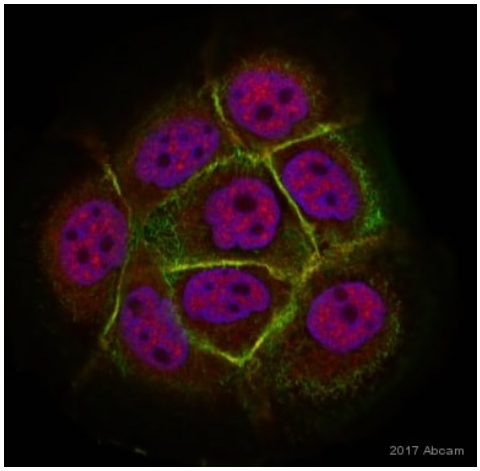
Immunoprecipitation - Anti-N Cadherin antibody - Intercellular Junction Marker (ab18203)

N Cadherin was immunoprecipitated using 0.5mg Mouse Brain whole tissue lysate, 5µg of Rabbit polyclonal to N Cadherin and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).
The antibody was incubated under agitation with Protein G beads for 10min, Mouse Brain whole tissue lysate lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.
Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70^{o}C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab18203.
Secondary: Mouse monoclonal [SB62a] Secondary Antibody to Rabbit IgG light chain (HRP) (**ab99697**).
Band: 135kDa: N Cadherin



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N Cadherin antibody - Intercellular Junction Marker (ab18203)
This image is courtesy of an anonymous Abreview

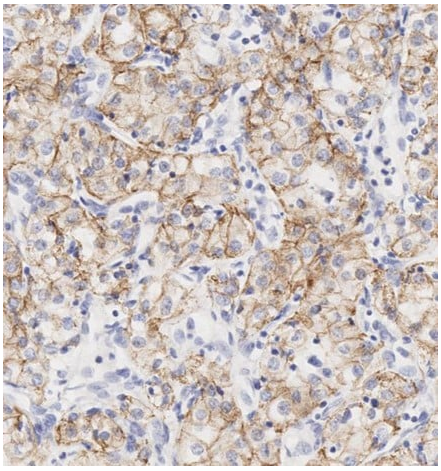
ab18203 staining N Cadherin in Human liver tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 10% serum for 30 minutes at 25°C; antigen retrieval was by heat mediation in a 10 mM citrate buffer pH6.0. Samples were incubated with primary antibody (1/100 in PBS plus casein) for 90 minutes at 37°C. A Biotin-conjugated Goat anti-rabbit IgG polyclonal (1/200) was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-N Cadherin antibody - Intercellular Junction Marker (ab18203)

This image is courtesy of an Abreview submitted by Dr. Ann Wheeler.

Paraformaldehyde-fixed, 0.2% Triton X100 permeabilized HaCaT (human keratinocyte cell line) cells stained for N Cadherin (green) using ab18203 at 1/200 dilution in ICC/IF, followed by Donkey anti Rabbit Alexa Fluor 568 at 1/500 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N Cadherin antibody - Intercellular Junction Marker (ab18203)

Immunohistochemistry of kidney carcinoma staining N Cadherin with ab18203 at 1µg/ml.

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