abcam

Product datasheet

Anti-N Cadherin antibody [EPR1791-4] - Low endotoxin, Azide free ab202030

KO VALIDATED Recombinant RabMAb

52 References 8 Images

Overview

Product name	Anti-N Cadherin antibody [EPR1791-4] - Low endotoxin, Azide free
Description	Rabbit monoclonal [EPR1791-4] to N Cadherin - Low endotoxin, Azide free
Host species	Rabbit
Specificity	The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
Tested applications	**Suitable for:** WB, IHC-P **Unsuitable for:** Flow Cyt or ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: A549, PC-3, HepG2, HEK-293T, C6, Human brain, Mouse brain, and Rat brain lysates; IHC-P: Human liver, and Human cardiac muscle tissues;
General notes	ab202030 is the carrier-free version of **ab76011**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. 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**.

Our **Low endotoxin, azide-free formats** have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.20 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR1791-4
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab202030 in the following tested applications.

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

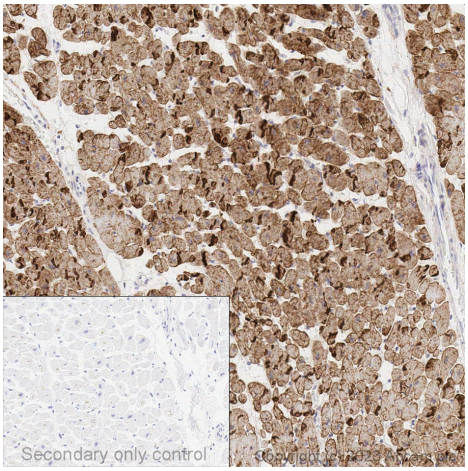
Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 100 kDa.
IHC-P		Use at an assay dependent concentration.

Application notes Is unsuitable for Flow Cyt or ICC/IF.

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.

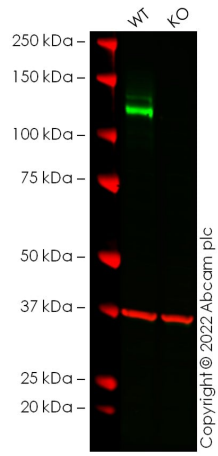
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N Cadherin antibody [EPR1791-4] - Low endotoxin, Azide free (ab202030)

Immunohistochemical analysis of formalin-fixed paraffin-embedded human heart labelling N Cadherin with **ab271856** at a concentration of 1µg/ml. The immunostaining was performed on a Ventana DISCOVERY ULTRA (Roche Tissue Diagnostics) instrument with an OptiView DAB IHC Detection Kit. Heat mediated antigen retrieval was conducted for 32min with ULTRA cell conditioning solution (CC1 pH8.5). **ab271856** anti N Cadherin antibody was incubated at 37°C for 16min. Sections were counterstained is with Hematoxylin II. Image inset shows absence of staining in secondary antibody only control.

This data was developed using the same antibody clone in a different buffer formulation (**ab271856**).



Western blot - Anti-N Cadherin antibody [EPR1791-4] - Low endotoxin, Azide free (ab202030)

All lanes : Anti-N Cadherin antibody [EPR1791-4] (**ab76011**) at 1/5000 dilution

Lane 1 : Wild-type HeLa cell lysate
Lane 2 : cdh2 knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution

Performed under reducing conditions.

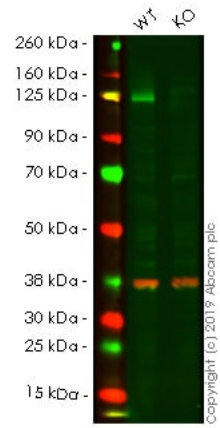
Predicted band size: 100 kDa
Observed band size: 125 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab76011**).

False colour image of Western blot: Anti-N Cadherin antibody [EPR1791-4] staining at 1/5000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (**ab8245**) loading control staining at 1/20000 dilution, shown in red. In Western blot, **ab76011** was shown to bind specifically to N Cadherin. A band was observed at 125 kDa in wild-type HeLa cell lysates with no signal observed at

this size in cdh2 knockout cell line **ab274934** (knockout cell lysate **ab274992**).

To generate this image, wild-type and cdh2 knockout HeLa cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Western blot - Anti-N Cadherin antibody [EPR1791-4] - Low endotoxin, Azide free (ab202030)

All lanes : Anti-N Cadherin antibody [EPR1791-4] (**ab76011**) at 1/5000 dilution

Lane 1 : Wild-type HEK-293T cell lysate
Lane 2 : CDH2 knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

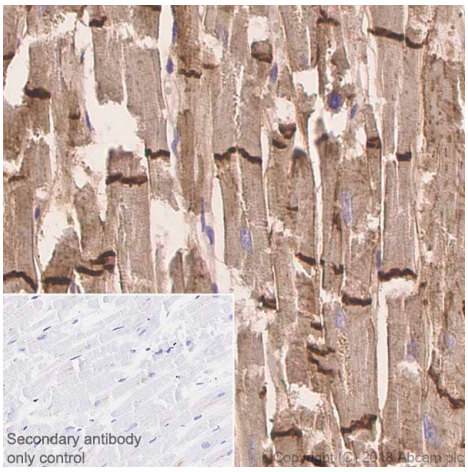
Predicted band size: 100 kDa
Observed band size: 100 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab76011**).

Lanes 1 - 2: Merged signal (red and green). Green - **ab76011** observed at 125 kDa. Red - loading control, **ab8245** observed at 37 kDa.

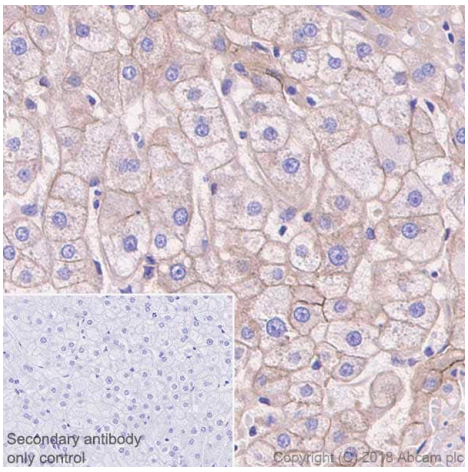
ab76011 was shown to react with N Cadherin in wild-type HEK-293T. Loss of signal was observed when knockout cell line **ab255377** (knockout cell lysate **ab263843**) was used. Wild-type and N Cadherin knockout samples were subjected to SDS-PAGE. **ab76011** and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 5000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour

at room temperature before imaging.



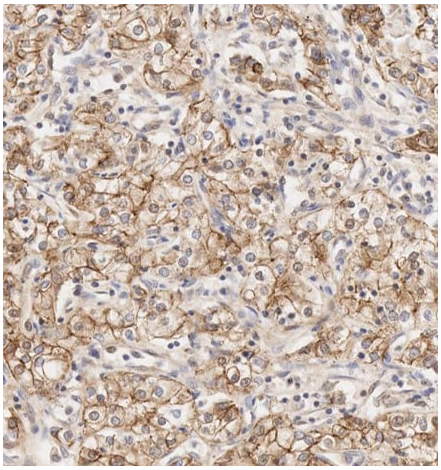
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N Cadherin antibody [EPR1791-4] - Low endotoxin, Azide free (ab202030)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human cardiac muscle tissue sections labeling N Cadherin with purified **ab76011** at 1:50 dilution (1.94 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use)was used as the secondary antibody. Negative control:PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N Cadherin antibody [EPR1791-4] - Low endotoxin, Azide free (ab202030)

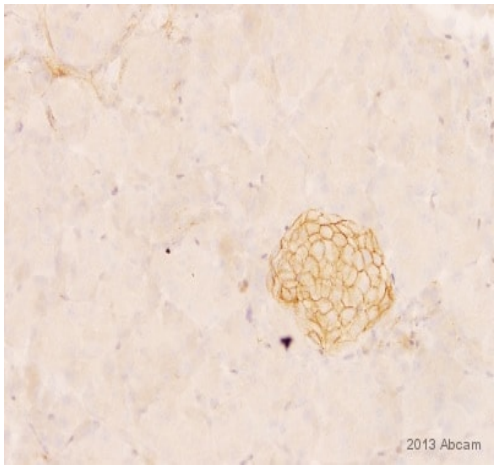
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human liver tissue sections labeling N Cadherin with purified **ab76011** at 1:50 dilution (1.94 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use)was used as the secondary antibody. Negative control:PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N Cadherin antibody [EPR1791-4] - Low endotoxin, Azide free (ab202030)

Immunohistochemistry of kidney carcinoma staining N Cadherin with **ab76011** at 1µg/ml

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76011**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N Cadherin antibody [EPR1791-4] - Low endotoxin, Azide free (ab202030)

This image is courtesy of an anonymous Abreview.

ab76011 staining N Cadherin in Mouse pancreas tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 1% BSA + 1% FBS for 2 hours at room temperature; antigen retrieval was by heat mediation in a citrate buffer pH6. Samples were incubated with primary antibody (1/500 in 1% BSA + 1% FBS) for 16 hours at 4°C. An undiluted HRP-conjugated Goat anti-rabbit IgG polyclonal was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab76011**).

Anti-N Cadherin antibody [EPR1791-4] - Low endotoxin, Azide free (ab202030)

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