abcam

Product datasheet

Anti-N Cadherin antibody [EPR1791-4] ab76011

KO 評価済 リコンビナント RabMAb

13 Abreviews 285 References 画像数 10

製品の概要

製品名	Anti-N Cadherin antibody [EPR1791-4]
製品の詳細	Rabbit monoclonal [EPR1791-4] to N Cadherin
由来種	Rabbit
特異性	The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
アプリケーション	**適用あり:** WB, IHC-P **適用なし:** Flow Cyt or ICC/IF
種交差性	**交差種:** Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: HEK-293T, A549, PC-3, HepG2, C6, Human brain, Mouse brain, and Rat brain lysates; IHC-P: Human liver, and Human cardiac muscle tissues;
特記事項	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**.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)
精製度	Protein A purified

ポリ/モノ	モノクローナル
クローン名	EPR1791-4
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab76011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
WB	★★★★★ (3)	1/5000 - 1/20000. Predicted molecular weight: 100 kDa.
IHC-P	★★★★★ (3)	Use at an assay dependent concentration.

追加情報 Is unsuitable for Flow Cyt or ICC/IF.

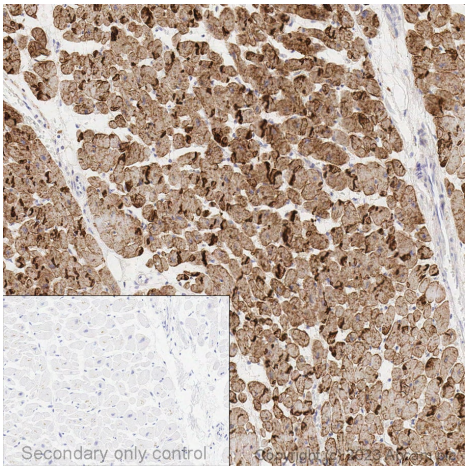
ターゲット情報

機能 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.

配列類似性 Contains 5 cadherin domains.

細胞内局在 Cell membrane.

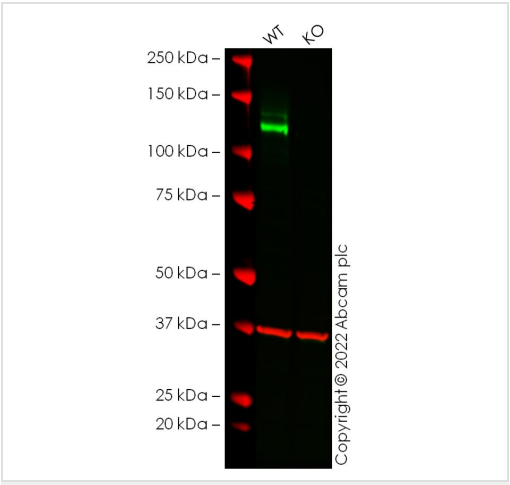
画像



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N Cadherin antibody [EPR1791-4] (ab76011)

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] (ab76011)

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.

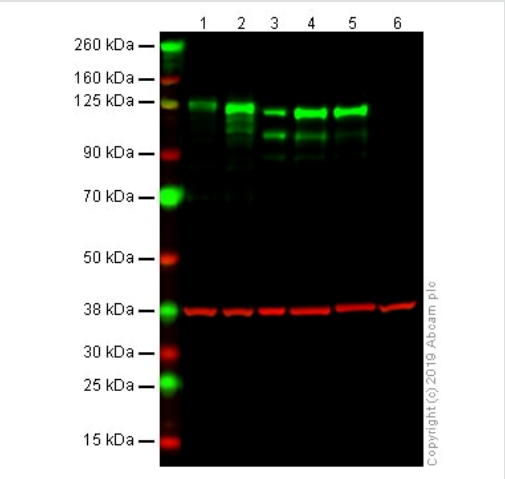
Secondary
All lanes : Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution

Performed under reducing conditions.

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

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] (ab76011)

All lanes : Anti-N Cadherin antibody [EPR1791-4] (ab76011) at 1/1000 dilution

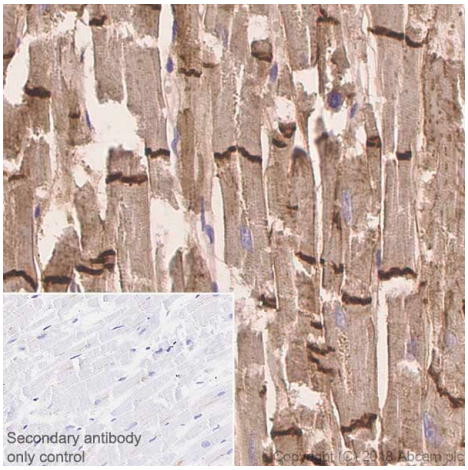
Lane 1 : HeLa Whole Cell Lysate
Lane 2 : HeLa Whole Cell Lysate (Scraped)
Lane 3 : Human Brain Tissue Lysate
Lane 4 : Mouse Brain Tissue Lysate
Lane 5 : Rat Brain Tissue Lysate
Lane 6 : MCF7 Whole Cell Lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

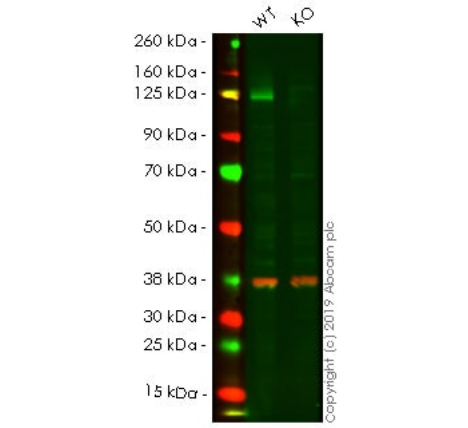
Predicted band size: 100 kDa
Observed band size: 125 kDa

This blot was produced using a 4-12% Bis-tris under the MOPS buffer system. The gel was run at 200V for 55 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was blocked for an hour using 3% milk before ab76011 and **ab8245** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at a 1/1000 dilution and 1/20000 dilution respectively. Antibody binding was detected using Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N Cadherin antibody [EPR1791-4] (ab76011)

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.



Western blot - Anti-N Cadherin antibody [EPR1791-4] (ab76011)

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.

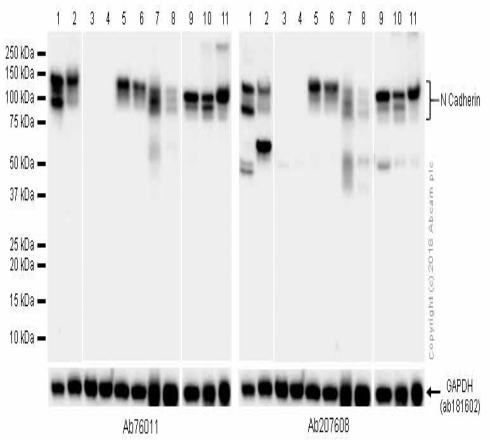
Performed under reducing conditions.

Predicted band size: 100 kDa

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.



Western blot - Anti-N Cadherin antibody [EPR1791-4] (ab76011)

All lanes : ab76011, Anti-N Cadherin antibody [EPR1791-4] (Left) or **ab207608**, Anti-N Cadherin antibody [EPR19654] (Right) at 1/1000 dilution

Lane 1 : A549 (Human lung carcinoma epithelial cell) whole cell lysates prepared in RIPA lysis method with 5% NFDM/TBST
Lane 2 : PC-3 (Human prostate adenocarcinoma epithelial cell) whole cell lysates prepared in RIPA lysis method with 5% NFDM/TBST
Lane 3 : HCT 116 (Human colorectal carcinoma epithelial cell) whole cell lysates prepared in RIPA lysis method with 5% NFDM/TBST
Lane 4 : HCT 116 (Human colorectal carcinoma epithelial cell) whole cell lysates prepared in 1%SDS Hot lysis method with 5% NFDM/TBST
Lane 5 : HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate prepared in RIPA lysis method with 5% NFDM/TBST
Lane 6 : HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate prepared in 1%SDS Hot lysis method with 5% NFDM/TBST
Lane 7 : C6 (Rat glial tumor glial cell) whole cell lysates prepared in RIPA lysis method with 5% NFDM/TBST
Lane 8 : C6 (Rat glial tumor glial cell) whole cell lysates prepared in 1%SDS Hot lysis method with 5% NFDM/TBST
Lane 9 : Human brain lysates prepared in 1%SDS Hot lysis method with 5% NFDM/TBST
Lane 10 : Mouse brain lysates prepared in 1%SDS Hot lysis method with 5% NFDM/TBST
Lane 11 : Rat brain lysates prepared in 1%SDS Hot lysis method with 5% NFDM/TBST

Lysates/proteins at 20 µg per lane.

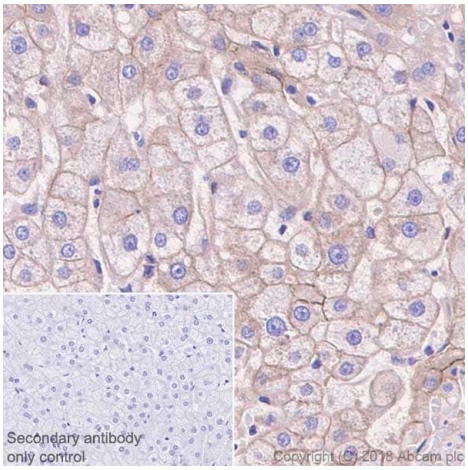
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 100 kDa

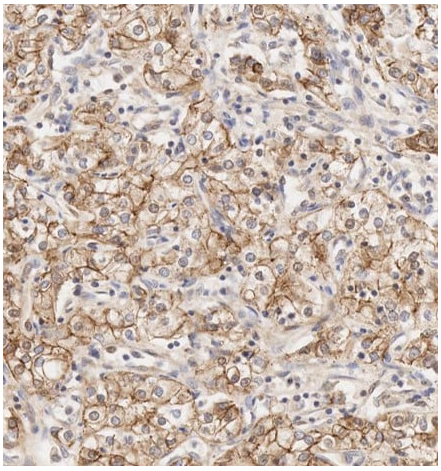
Observed band size: 110-130 kDa

The molecular weight observed is consistent with what has been described in the literature (PMID: 22553038). This antibody fails to detect N Cadherin in HCT 116 cell which is positive described in the literature (PMID: 23431386 and 26540342)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N Cadherin antibody [EPR1791-4] (ab76011)

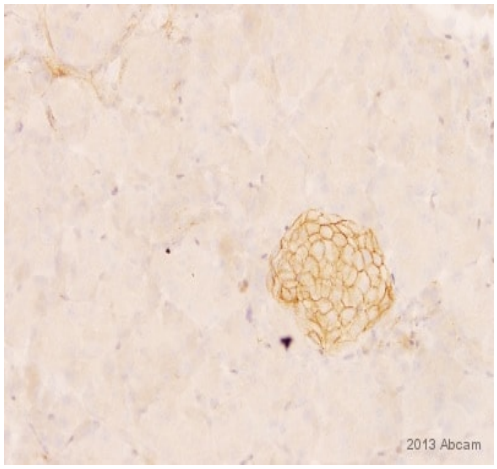
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human liver tissue sections labeling N Cadherin with purified ab76011 at 1:50 dilution (1.94 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP 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] (ab76011)

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

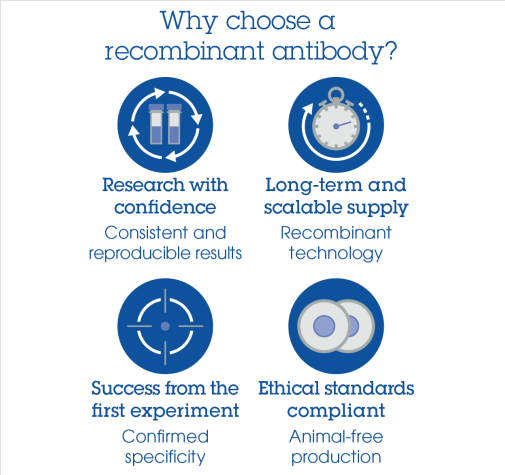
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-N Cadherin antibody [EPR1791-4] (ab76011)

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.



Anti-N Cadherin antibody [EPR1791-4] (ab76011)

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