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# Product datasheet

# Anti-pan Cadherin antibody ab16505

★★★★★ 9 Abreviews 62 References 6 图像

概述

产品名称 Anti-pan Cadherin抗体

描述 兔多克隆抗体to pan Cadherin

**宿主** Rabbit

经测试应用 适用于: ICC/IF, WB, IHC-P 中属反应性 与反应: Mouse, Rat, Human

预测可用于: Chicken, Cow, Xenopus laevis, Zebrafish 4

免疫原 Synthetic peptide corresponding to Human pan Cadherin aa 850 to the C-terminus (C terminal)

conjugated to keyhole limpet haemocyanin.

(Peptide available as ab17098)

**阳性**对照 ICC/IF: U2OS; HeLa cells. WB: Mouse Heart; Mouse Muscle; Human Heart; Rat Heart. IHC-P:

Human Liver.

常规说明

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

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 or -

80°C. Avoid freeze / thaw cycle.

**存储溶液** 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.

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纯**度** Immunogen affinity purified

**克隆** 多克隆

同种型 lgG

#### 应用

#### The Abpromise guarantee Abpromise™承诺保证使用ab16505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。

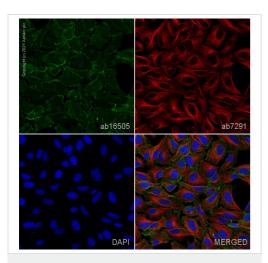
应用	Ab评论	说明
ICC/IF	<b>★★★★★ (4)</b>	Use a concentration of 2 $\mu$ g/ml. A diffuse signal is seen throughout the cells if higher concentrations are used (5-10 $\mu$ g/ml). We have had reports that the antibody works less well in this application in murine (3T3) cells.
WB	<b>★★★★</b> ★ ★ (2)	Use a concentration of 1 µg/ml. Detects a band of approximately 135 kDa (predicted molecular weight: 100 kDa).
IHC-P	<b>★★★★★ (2)</b>	Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

#### 靶标

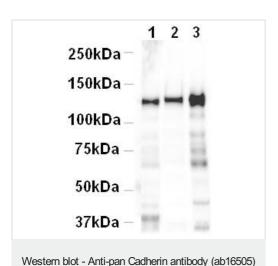
#### 相关性

Cadherins are members of a multigene family of single chain glycoprotein receptors mediating calcium dependent cell-cell adhesion. They play an important role in the growth and development of cells via the mechanisms of control of tissue architecture and the maintenance of tissue integrity. Cadherins are expressed in a tissue specific manner and and are required for assembly of cells into solid tissue. Individual cadherin molecules are known to co-operate with each other to form a linear cell adhesion zipper. In adhesion junctions cadherins are bound to beta and gamma catenins which in turn bind to alpha catenin, an actin binding protein. Cadherins play an important part in tumor invasion and metastasis.

#### 图片



Immunocytochemistry/ Immunofluorescence - Antipan Cadherin antibody (ab16505)



ab16505 staining pan Cadherin in U2OS cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Tween for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab16505 at 1µg/ml and ab7291, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with ab150081, Goat polyclonal Secondary Antibody to Rabbit lgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and ab150120, Goat polyclonal Secondary Antibody to Mouse lgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a confocal microscope (Leica-Microsystems TCS SP8) and a single confocal section is shown.

All lanes: Anti-pan Cadherin antibody (ab16505) at 1 µg/ml

Lane 1 : Human heart lysate
Lane 2 : Mouse heart lysate
Lane 3 : Rat heart lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) preadsorbed (ab7090) at 1/5000 dilution

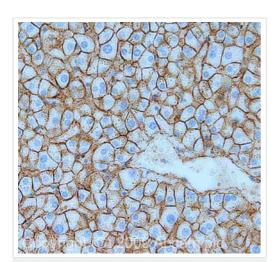
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 100 kDa **Observed band size:** 125-140 kDa

Additional bands at: 40 kDa, 65 kDa, 75 kDa, 90 kDa. We are

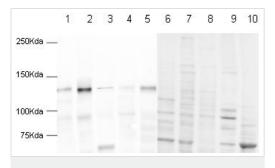
unsure as to the identity of these extra bands.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-pan Cadherin antibody (ab16505)

#### Exposure time: 1 minute

IHC image of pan Cadherin staining in human liver FFPE section, performed on a Bond<sup>TM</sup> 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 ab16505, 1µg/ml, for 8 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.



Western blot - Anti-pan Cadherin antibody (ab16505)

All lanes: Anti-pan Cadherin antibody (ab16505) at 1 µg/ml

Lane 1: Mouse heart

Lane 2: HeLa cell lysate

Lane 3: 3T3 cell lysate

Lane 4: Mouse muscle

Lane 5: Human heart

Lane 6: Mouse heart with Human pan Cadherin peptide

(ab17098) at 1 µg/ml

Lane 7: HeLa cell lysate with Human pan Cadherin peptide

(ab17098) at 1 µg/ml

Lane 8: 3T3 cell lysate with Human pan Cadherin peptide

(<u>**ab17098**</u>) at 1 μg/ml

Lane 9: Mouse muscle with Human pan Cadherin peptide

(<u>**ab17098**</u>) at 1 μg/ml

Lane 10: Human heart with Human pan Cadherin peptide

(<u>ab17098</u>) at 1 μg/ml

Lysates/proteins at 20 µg per lane.

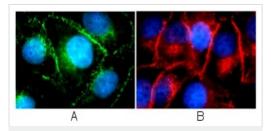
#### **Secondary**

All lanes: Goat anti-rabbit conjugated to Alexafluor 680 at 1/10000

dilution

Performed under reducing conditions.

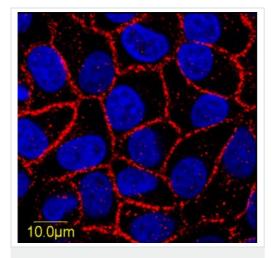
Predicted band size: 100 kDa



Immunocytochemistry/ Immunofluorescence - Antipan Cadherin antibody (ab16505)

This image is courtesy of Rosmaria Mangiacasale & Patrizia Lavia, University La Sapienza

HeLa cells fixed in methanol and stained with ab16505 (2 $\mu$ g/ml). The cells were fixed in 100% methanol for 6 minutes at -20°C, then washed once in PBS. The 2 images show the cells stained with different secondary antibodies, Donkey anti Rabbit FITC (image A) and Donkey anti Rabbit Cy3 (image B). In each case ab16505 stains the plasma membrane. In image A ab16505 is stained green and in image B ab16505 is stained red. In both images the DNA is stained with DAPI (blue).



Immunocytochemistry/ Immunofluorescence - Antipan Cadherin antibody (ab16505)

Image from Kiss K et al., PLoS One. 2012;7(5):e37378. Epub 2012 May 24. Fig 1.; doi:10.1371/journal.pone.0037378; May 24, 2012, PLoS ONE 7(5): e37378.

Immunofluorescence analysis of HeLa cells, staining pan Cadherin (red) with ab16505.

Cells were fixed with paraformaldehyde, permeabilized in methanol and blocked for 1 hour at room temperature in DPBS containing 2 mg/mL BSA, 1% fish gelatin, 0.1% Triton-X 100 and 5% goat serum. Cells were then incubated for 1 hour at room temperature with the primary antibody diluted in blocking buffer. An AlexaFluor®-conjugated anti-rabbit lgG was used as the secondary antibody. Nuclei were counterstained with DAPI (blue).

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