abcam

Product datasheet

Anti-pan Cadherin antibody [mAbcam22744] ab22744

13 Abreviews 21 References 6 Images

Overview

Product name	Anti-pan Cadherin antibody [mAbcam22744]
Description	Mouse monoclonal [mAbcam22744] to pan Cadherin
Host species	Mouse
Specificity	Detects a weaker band in human heart than in rat heart.
Tested applications	**Suitable for:** ICC/IF, WB **Unsuitable for:** Flow Cyt
Species reactivity	**Reacts with:** Mouse, Rat, Human **Predicted to work with:** Chicken, Dog, Xenopus laevis, Monkey, Zebrafish, African green monkey
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
General notes	This product is useful for the detection of members of the cadherin family or genetically engineered proteins containing the C-terminal cadherin tail, and for demonstration of adherens type cell-cell junctions regardless of their cadherin type. This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**. 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: 7.50 Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine

Purity	IgG fraction
Primary antibody notes	This product is useful for the detection of members of the cadherin family or genetically engineered proteins containing the C-terminal cadherin tail, and for demonstration of adherens type cell-cell junctions regardless of their cadherin type.
Clonality	Monoclonal
Clone number	mAbcam22744
Myeloma	Sp2/0-Ag14
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab22744 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
ICC/IF	★★★☆☆ (4)	Use a concentration of 5 µg/ml.
WB	★★★★★ (6)	1/1000. Detects a band of approximately 125-140 kDa (predicted molecular weight: 125 kDa). Abcam recommends using 3-5% milk as the blocking agent. Please see Western Blot data below.

Application notes Is unsuitable for Flow Cyt.

Target

Relevance 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.

Images

Western blot - Anti-pan Cadherin antibody [mAbcam22744] (ab22744)

Lane 1 : Anti-pan Cadherin antibody [mAbcam22744] (ab22744) at 1 µg/ml (Blocked in 5% BSA)
Lane 2 : Anti-pan Cadherin antibody [mAbcam22744] (ab22744) at 1 µg/ml (Blocked in 5% Milk)

All lanes : Heart (Rat) Tissue Lysate

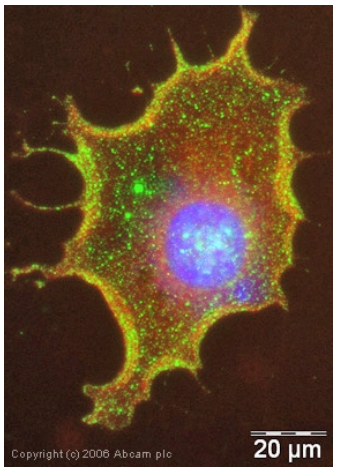
Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) (**ab65485**) at 1/3000 dilution

Performed under reducing conditions.

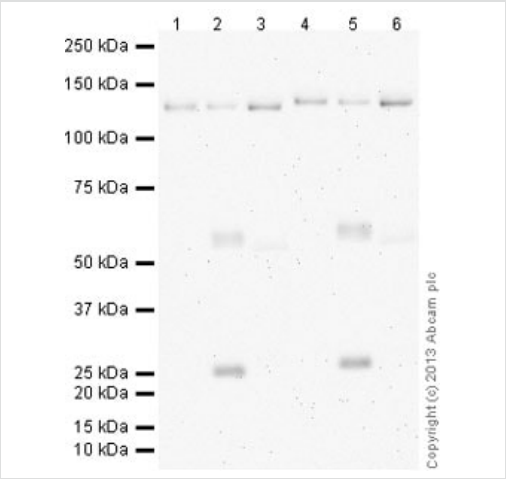
Predicted band size: 125 kDa

Exposure time: 30 seconds



Immunocytochemistry/ Immunofluorescence - Anti-pan Cadherin antibody [mAbcam22744] (ab22744)

ICC/IF image of ab22744 stained human HeLa cells. The cells were methanol fixed (5 min) and incubated with the antibody (ab22744, 5µg/ml) for 1h at room temperature. The secondary antibody (green) was Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Image-iT^{TM} FX Signal Enhancer was used as the primary blocking agent, 5% BSA (in TBS-T) was used for all other blocking steps. DAPI was used to stain the cell nuclei (blue). Alexa Fluor® 594 phalloidin was used to label F-actin (red).



Western blot - Anti-pan Cadherin antibody [mAbcam22744] (ab22744)

All lanes : Anti-pan Cadherin antibody [mAbcam22744] (ab22744) at 1 µg/ml

Lane 1 : Heart (Rat) Tissue Lysate (blocked with 5% Milk)
Lane 2 : Heart (Mouse) Tissue Lysate (blocked with 5% Milk)
Lane 3 : Heart (Human) Tissue Lysate - adult normal tissue (blocked with 5% Milk)
Lane 4 : Heart (Rat) Tissue Lysate (blocked with 3% Milk)
Lane 5 : Heart (Mouse) Tissue Lysate (blocked with 3% Milk)
Lane 6 : Heart (Human) Tissue Lysate - adult normal tissue (blocked with 3% Milk)

Lysates/proteins at 20 µg per lane.

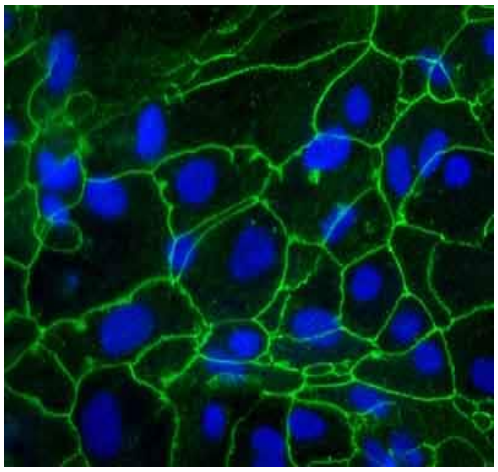
Secondary
All lanes : Goat Anti-Mouse IgG H&L (HRP) preadsorbed (**ab97040**) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 125 kDa
Observed band size: 125 kDa
Additional bands at: 25 kDa, 58 kDa. We are unsure as to the identity of these extra bands.

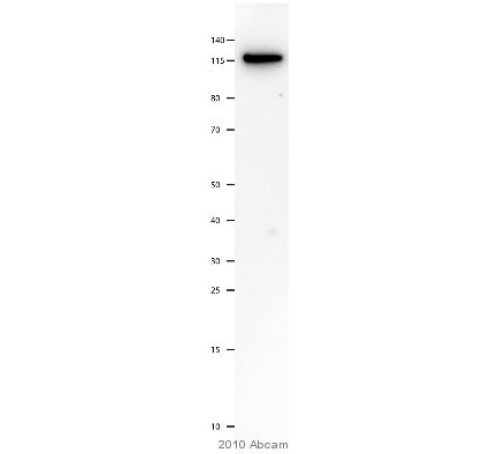
Exposure time: 8 minutes



Immunocytochemistry/ Immunofluorescence - Anti-pan Cadherin antibody [mAbcam22744] (ab22744)

Image courtesy of an anonymous Abreview.

ab22744 staining pan Cadherin in mixed glia prepared from mouse brain by Immunocytochemistry/ Immunofluorescence. The cells were fixed in methanol, permeabilised in 0.5% (w/v) saponin and then blocked using 10% serum for 2 hours at 23°C. Samples were then incubated with primary antibody at 1/100 for 2 hours at 23°C. The secondary antibody used was a goat anti-mouse IgG conjugated to Alexa Fluor® 488 (green) used at a 1/400 dilution. Counterstained with DAPI (blue).



Western blot - Anti-pan Cadherin antibody [mAbcam22744] (ab22744)

This image is courtesy of an Anonymous abreview.

Anti-pan Cadherin antibody [mAbcam22744] (ab22744) at 1/500 dilution + Mouse cultured cortical neurons at 20 µg

Secondary

HRP-conjugated Goat Anti-Mouse IgG (H+L) polyclonal at 1/10000 dilution

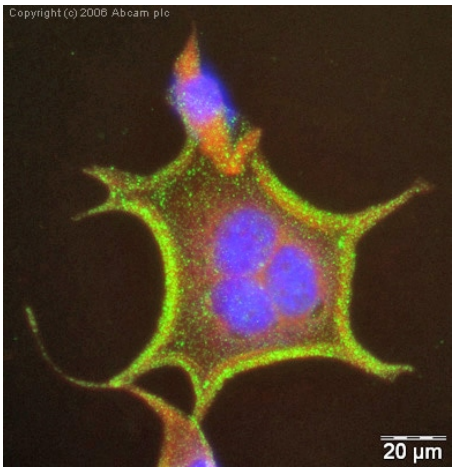
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 125 kDa

Exposure time: 1 minute

Blocking performed with 5% milk for 1 hour.
Primary diluted with PBS + 0.5% Tween20 and incubated for 12 hours at 4°C
Performed under denaturing conditions.



Immunocytochemistry/ Immunofluorescence - Anti-pan Cadherin antibody [mAbcam22744] (ab22744)

ICC/IF image of ab22744 stained human HeLa cells. The cells were methanol fixed (5 min) and incubated with the antibody (ab22744, 5µg/ml) for 1h at room temperature. The secondary antibody (green) was Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Image-iT™ FX Signal Enhancer was used as the primary blocking agent, 5% BSA (in TBS-T) was used for all other blocking steps. DAPI was used to stain the cell nuclei (blue). Alexa Fluor® 594 phalloidin was used to label F-actin (red).

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