abcam

Product datasheet

Anti-P cadherin antibody [EPR22426] ab242060

Recombinant RabMAb

2 References 6 Images

Overview

Product name Anti-P cadherin antibody [EPR22426]

Description Rabbit monoclonal [EPR22426] to P cadherin

Host species Rabbit

Tested applications Suitable for: WB, IHC-P, ICC/IF

Unsuitable for: Flow Cyt or IP

Species reactivity Reacts with: Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: A431, PC-3 and BxPC-3 whole cell lysates. IHC-P: Human breast and breast cancer tissues.

ICC/IF: A431 and BxPC-3 cells.

General notes 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**.

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 long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal Clone number EPR22426

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab242060 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		1/1000. Detects a band of approximately 120 kDa (predicted molecular weight: 91 kDa).
IHC-P		1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/50.

Application notes

Is unsuitable for Flow Cyt or IP.

T	a	r	g	e	t

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.

Tissue specificity

Expressed in some normal epithelial tissues and in some carcinoma cell lines.

Involvement in disease

Defects in CDH3 are the cause of hypotrichosis with juvenile macular dystrophy (HJMD) [MIM:601553]. HJMD is a rare autosomal recessive disorder characterized by early hair loss heralding severe degenerative changes of the retinal macula and culminating in blindness during the second to third decade of life.

Defects in CDH3 are the cause of ectodermal dysplasia with ectrodactyly and macular dystrophy (EEM) [MIM:225280]; also known as EEM syndrome, Albrectsen-Svendsen syndrome or Ohdo-Hirayama-Terawaki syndrome. Ectodermal dysplasia defines a heterogeneous group of disorders due to abnormal development of two or more ectodermal structures. EEM is an autosomal recessive condition characterized by features of ectodermal dysplasia such as sparse eyebrows and scalp hair, and selective tooth agenesis associated with macular dystrophy and

Sequence similarities

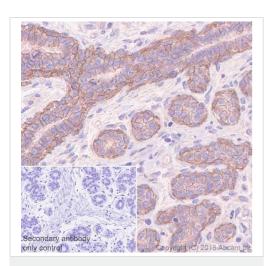
Contains 5 cadherin domains.

Cellular localization

Cell membrane.

ectrodactyly.

Images

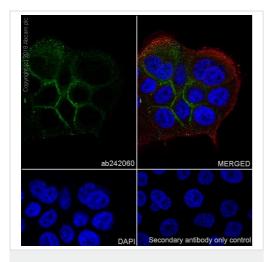


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-P cadherin antibody
[EPR22426] (ab242060)

Immunohistochemical analysis of paraffin-embedded human breast tissue labeling P cadherin with ab242060 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Membranous and cytoplasmic staining in ductal epithelium of human breast (PMID: 25424750, 2702654) is observed. Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

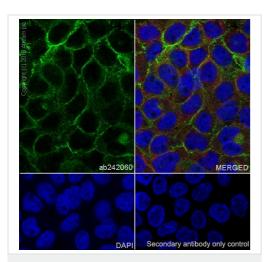


Immunocytochemistry/ Immunofluorescence - Anti-P cadherin antibody [EPR22426] (ab242060)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized BxPC-3 (human pancreas adenocarcinoma cell line) cells labeling P cadherin with ab242060 at 1/50 dilution followed by Goat Anti-Rabbit lgG H&L (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous and cytoplasmic staining in BxPC-3 cells.

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594) (**ab195889**) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution.

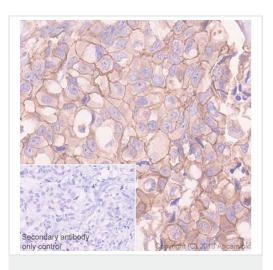


Immunocytochemistry/ Immunofluorescence - Anti-P cadherin antibody [EPR22426] (ab242060)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized A431 (human epidermoid carcinoma cell line) cells labeling P cadherin with ab242060 at 1/50 dilution followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous and cytoplasmic staining in A431 cells.

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (ab195889) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution.



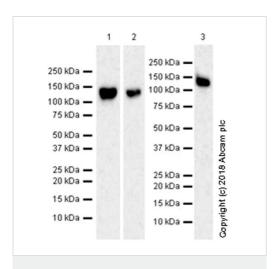
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-P cadherin antibody
[EPR22426] (ab242060)

Immunohistochemical analysis of paraffin-embedded human breast cancer tissue labeling P cadherin with ab242060 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Membranous and cytoplasmic staining in human breast cancer (PMID: 28084338) is observed. Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-P cadherin antibody [EPR22426] (ab242060)

All lanes : Anti-P cadherin antibody [EPR22426] (ab242060) at 1/1000 dilution

Lane 1 : A431 (human epidermoid carcinoma cell line) whole cell lysate

Lane 2 : PC-3 (human prostate adenocarcinoma cell line) whole cell lysate

Lane 3 : BxPC-3 (human pancreas adenocarcinoma epithelial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

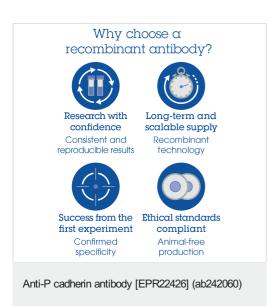
All lanes : Goat Anti-Rabbit $\lg G \ H\&L \ (HRP) \ (\underline{ab97051})$ at 1/100000 dilution

Predicted band size: 91 kDa **Observed band size:** 120 kDa

Exposure time: Lanes 1 and 2: 136 seconds; Lane 3: 3 minutes.

Blocking/Dilution buffer: 5% NFDM/TBST.

The molecular weight observed is consistent with what has been described in the literature (PMID: 2702654, 15548699).



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