abcam

Product datasheet

Anti-CTNNA1 antibody [EP1793Y] ab51032





重组 RabMAb

★★★★★ 8 Abreviews 31 References 7 图像

概述

产品名称 Anti-CTNNA1抗体[EP1793Y]

描述 兔单克隆抗体[EP1793Y] to CTNNA1

宿主 Rabbit

经测试应用 适用于: WB, IHC-P, IP

不适用于: Flow Cyt or ICC/IF

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: Mouse heart and kidney lysate. Rat brain and kidney lysate. HeLa, A431 and HUVEC whole

cell lysate. IHC-P: Rat and human stomach tissue and mouse liver tissue IP: HeLa (human cervix

adenocarcinoma epithelial cell) whole cell lysate

常规说明 Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

性能

形式 Liquid

存放说明 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

纯度 Protein A purified

克隆 单克隆 EP1793Y 克隆编号

同种型 lgG

应用

Abpromise™承诺保证使用ab51032于以下的经测试应用 The Abpromise guarantee

"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 |
|-------|---------|---|
| WB | ****(4) | 1/10000. Detects a band of approximately 100 kDa (predicted molecular weight: 100 kDa). |
| IHC-P | | 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. |
| IP | | 1/100. |

应用说明

Is unsuitable for Flow Cyt or ICC/IF.

靶标

功能

Associates with the cytoplasmic domain of a variety of cadherins. The association of catenins to cadherins produces a complex which is linked to the actin filament network, and which seems to be of primary importance for cadherins cell-adhesion properties. Can associate with both E- and N-cadherins. Originally believed to be a stable component of E-cadherin/catenin adhesion complexes and to mediate the linkage of cadherins to the actin cytoskeleton at adherens junctions. In contrast, cortical actin was found to be much more dynamic than E-cadherin/catenin complexes and CTNNA1 was shown not to bind to F-actin when assembled in the complex suggesting a different linkage between actin and adherens junctions components. The homodimeric form may regulate actin filament assembly and inhibit actin branching by competing with the Arp2/3 complex for binding to actin filaments. May play a crucial role in cell differentiation.

组织特异性

Expressed ubiquitously in normal tissues.

序列相似性

Belongs to the vinculin/alpha-catenin family.

翻译后修饰

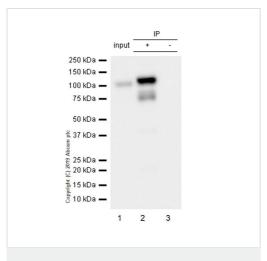
Sumoylated.

细胞定位

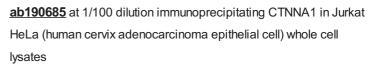
Cell membrane and Cytoplasm > cytoskeleton. Cell junction > adherens junction. Cell membrane.

Cell junction. Found at cell-cell boundaries and probably at cell-matrix boundaries.

图片



Immunoprecipitation - Anti-CTNNA1 antibody [EP1793Y] (ab51032)



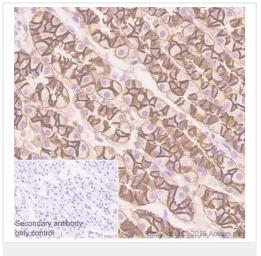
Lane 1 (input): HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate 10µg

Lane 2 (+): HeLa whole cell lysate

Lane 3 (-): Rabbit monoclonal $\lg G$ (ab172730) instead of ab51032 in HeLa whole cell lysate

For western blotting, ab51032 at 1/500 dilution and VeriBlot for IP Detection Reagent (HRP)(ab131366) at 1/1000 dilution were used.

Blocking and diluting buffer: 5% NFDM /TBST.



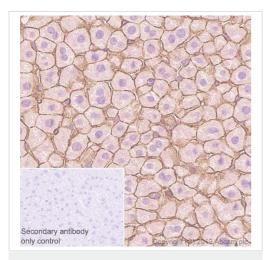
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CTNNA1 antibody
[EP1793Y] (ab51032)

Paraffin-embedded rat stomach tissue stained for CTNNA1 with ab51032 at a 1/100 dilution in immunohistochemical analysis. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as a secondary antibody and Hematoxylin used as a counterstain. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) was performed for 20 minutes.

Positive staining was seen on rat stomach.

The section was incubated with ab51032 for 30 minutes at room temperature.

The immunostaining staining was performed on a Leica Biosystems BOND® RX instrument.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CTNNA1 antibody
[EP1793Y] (ab51032)

Paraffin-embedded mouse liver tissue stained for CTNNA1 with ab51032 at a 1/100 dilution in immunohistochemical analysis. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as a secondary antibody and Hematoxylin used as a counterstain. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) was performed for 20 minutes.

Positive staining was seen on mouse liver.

The section was incubated with ab51032 for 30 minutes at room temperature.

The immunostaining staining was performed on a Leica Biosystems BOND® RX instrument.



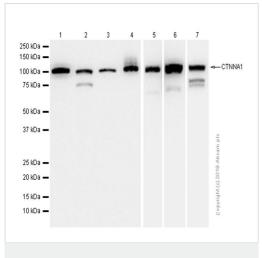
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CTNNA1 antibody
[EP1793Y] (ab51032)

Paraffin-embedded human stomach tissue stained for CTNNA1 with ab51032 at a 1/100 dilution in immunohistochemical analysis. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as a secondary antibody and Hematoxylin used as a counterstain. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) was performed for 20 minutes.

Positive staining was seen on human stomach.

The section was incubated with ab51032 for 30 minutes at room temperature.

The immunostaining staining was performed on a Leica Biosystems BOND® RX instrument.



Western blot - Anti-CTNNA1 antibody [EP1793Y] (ab51032)

All lanes : Anti-CTNNA1 antibody [EP1793Y] (ab51032) at 1/10000 dilution

Lane 1: Mouse heart lysate

Lane 2: Mouse kidney lysate

Lane 3: Rat brain lysate

Lane 4: Rat kidney lysate

Lane 5 : HeLa (Human cervix adenocarcinoma epithelial cell)

whole cell lysate

Lane 6: A431 (Human epidermoid carcinoma epithelial cell) whole

cell lysate

Lane 7: HUVEC (Human umbilical vein endothelial cell) whole cell

lysate

Lysates/proteins at 20 µg per lane.

Secondary

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

dilution

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

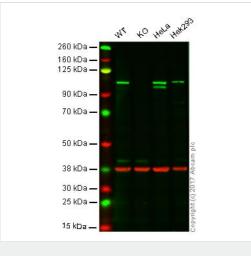
Expsure time

Lane 1-4: 180 seconds

Lane 5,7: 40 seconds

Lane 6: 5 seconds

Blocking/diluting buffer and concentration: 5% NFDM/TBST



Western blot - Anti-CTNNA1 antibody [EP1793Y] (ab51032)

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

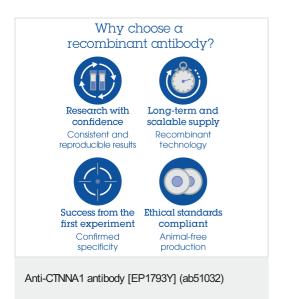
Lane 2: CTNNA1 HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

Lane 4: HEK293 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab51032 observed at 100 kDa. Red - loading control, <u>ab9484</u>, observed at 37 kDa.

ab51032 was shown to recognize CTNNA1 in wild-type cells as signal was lost at the expected MW in CTNNA1 knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and CTNNA1 knockout samples were subjected to SDS-PAGE. Ab51032 and ab9484 (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/50000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



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