


# Anti-CTNNA1 antibody ab227181

8 Images

### Overview

<b>Product name</b>	Anti-CTNNA1 antibody
<b>Description</b>	Rabbit polyclonal to CTNNA1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, ICC/IF, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human <b>Predicted to work with:</b> Rabbit, Cow, Xenopus laevis, Rhesus monkey 
<b>Immunogen</b>	Recombinant fragment within Human CTNNA1 (internal sequence). The exact sequence is proprietary. Database link: <a href="#">P35221</a>
<b>Positive control</b>	WB: HepG2, NIH/3T3, JC and PC-12 whole cell lysates. IHC-P: Mouse prostate and intestine tissue. ICC/IF: HeLa cells.
<b>General notes</b>	<p>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.</p> <p>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&amp;As</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab227181 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 - 1/10000. Predicted molecular weight: 100 kDa.
ICC/IF		1/100 - 1/1000.
IHC-P		1/100 - 1/1000.

## Target

### Function

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.

### Tissue specificity

Expressed ubiquitously in normal tissues.

### Sequence similarities

Belongs to the vinculin/alpha-catenin family.

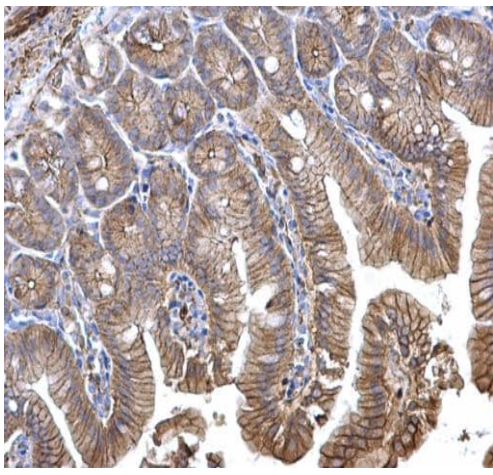
### Post-translational modifications

Sumoylated.

### Cellular localization

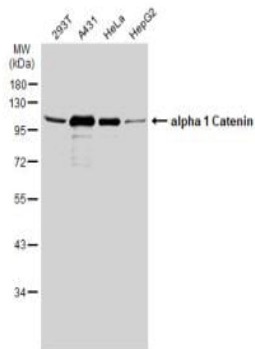
Cell membrane and Cytoplasm > cytoskeleton. Cell junction > adherens junction. Cell membrane. Cell junction. Found at cell-cell boundaries and probably at cell-matrix boundaries.

## Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CTNNA1 antibody (ab227181)

Paraffin-embedded mouse intestine tissue stained for CTNNA1 using ab227181 at 1/500 dilution in immunohistochemical analysis.



Western blot - Anti-CTNNA1 antibody (ab227181)

**All lanes** : Anti-CTNNA1 antibody (ab227181) at 1/1000 dilution

**Lane 1** : 293T cell lysate

**Lane 2** : A431 cell lysate

**Lane 3** : HeLa cell lysate

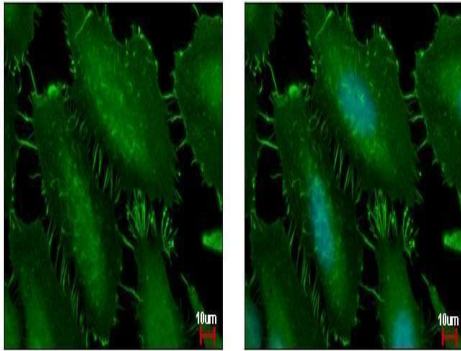
**Lane 4** : HepG2 cell lysate

Lysates/proteins at 30 µg per lane.

**Secondary**

**All lanes** : HRP-conjugated anti-rabbit IgG antibody

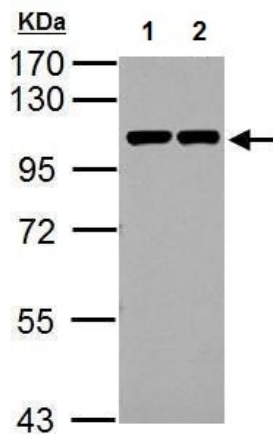
**Predicted band size:** 100 kDa



Immunocytochemistry/ Immunofluorescence - Anti-CTNNA1 antibody (ab227181)

4% paraformaldehyde-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained for CTNNA1 (green) using ab227181 at 1/500 dilution in ICC/IF.

Nuclear Counterstain: Hoechst 33342 (blue).



Western blot - Anti-CTNNA1 antibody (ab227181)

**All lanes** : Anti-CTNNA1 antibody (ab227181) at 1/10000 dilution

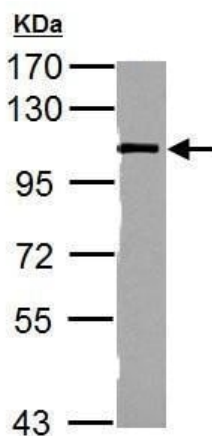
**Lane 1** : NIH/3T3 (mouse embryonic fibroblast cell line) whole cell lysate

**Lane 2** : JC whole cell lysate

Lysates/proteins at 30 µg per lane.

**Predicted band size:** 100 kDa

7.5% SDS-PAGE gel.

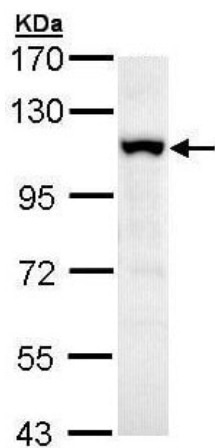


Western blot - Anti-CTNNA1 antibody (ab227181)

Anti-CTNNA1 antibody (ab227181) at 1/10000 dilution + PC-12 (rat adrenal gland pheochromocytoma cell line) whole cell lysate at 30 µg

**Predicted band size:** 100 kDa

7.5% SDS-PAGE gel.

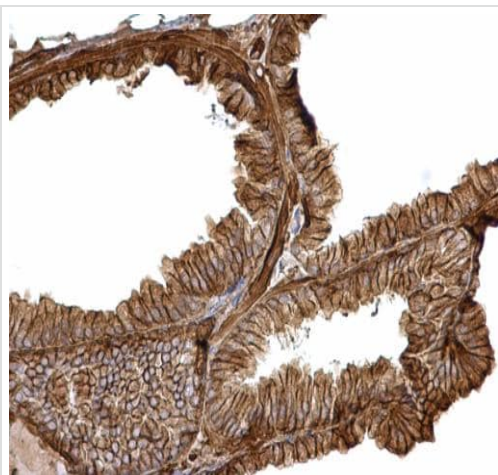


Western blot - Anti-CTNNA1 antibody (ab227181)

Anti-CTNNA1 antibody (ab227181) at 1/1000 dilution + HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate at 30  $\mu$ g

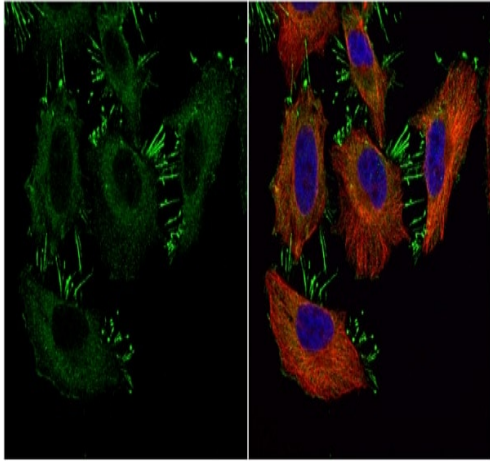
**Predicted band size:** 100 kDa

7.5% SDS-PAGE gel.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CTNNA1 antibody (ab227181)

Paraffin-embedded mouse prostate carcinoma tissue stained for CTNNA1 using ab227181 at 1/500 dilution in immunohistochemical analysis.



Immunocytochemistry/ Immunofluorescence - Anti-CTNNA1 antibody (ab227181)

4% paraformaldehyde-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained for CTNNA1 (green) using ab227181 at 1/500 dilution in ICC/IF.

Counterstain: alpha Tubulin was stained by an alpha Tubulin antibody at 1/500 dilution (red). Nuclear Counterstain: Hoechst 33342 (blue).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors