

Product datasheet

Anti-CDCP1 antibody [EPR23162-102] ab252947

Recombinant RabMAb

[1 References](#) [9 Images](#)

Overview

Product name	Anti-CDCP1 antibody [EPR23162-102]
Description	Rabbit monoclonal [EPR23162-102] to CDCP1
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, IHC-P, WB, IP, Flow Cyt (Intra)
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: PC-3, MDA-MB-231 and Human colon cancer lysates. IHC-P: Human colon, Human colon cancer and Human breast cancer tissues. ICC/IF: HCT 116 cells. Flow Cyt (intra): MCF7 cells. IP: PC-3 cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

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	EPR23162-102

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab252947 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		1/50.
IHC-P		1/200. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/1000. Predicted molecular weight: 92 kDa.
IP		1/30.
Flow Cyt (Intra)		1/500.

Target

Function

May be involved in cell adhesion and cell matrix association. May play a role in the regulation of anchorage versus migration or proliferation versus differentiation via its phosphorylation. May be a novel marker for leukemia diagnosis and for immature hematopoietic stem cell subsets. Belongs to the tetraspanin web involved in tumor progression and metastasis.

Tissue specificity

Highly expressed in mitotic cells with low expression during interphase. Detected at highest levels in skeletal muscle and colon with lower levels in kidney, small intestine, placenta and lung. Up-regulated in a number of human tumor cell lines, as well as in colorectal cancer, breast carcinoma and lung cancer. Also expressed in cells with phenotypes reminiscent of mesenchymal stem cells and neural stem cells.

Sequence similarities

Contains 1 CUB domain.

Post-translational modifications

Phosphorylated on tyrosine by kinases of the SRC family such as SRC and YES as well as by the protein kinase C gamma/PRKCG. Dephosphorylated by phosphotyrosine phosphatases. Also phosphorylated by suramin, a heparin analog. Tyrosine phosphorylated in response to dissociation of integrin alpha-6 beta-4 from laminin-5.

N-glycosylated.

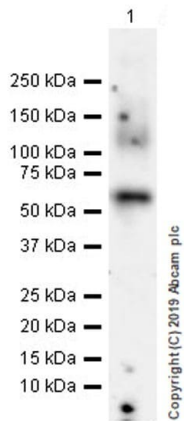
A soluble form may also be produced by proteolytic cleavage at the cell surface (shedding).

Another peptide of 80 kDa (p80) is present in cultured keratinocytes probably due to tryptic cleavage at an unidentified site on its N-terminal side. Converted to p80 by plasmin, a trypsin-like protease.

Cellular localization

Secreted and Cell membrane. Shedding may also lead to a soluble peptide.

Images



Western blot - Anti-CDCP1 antibody [EPR23162-102] (ab252947)

Anti-CDCP1 antibody [EPR23162-102] (ab252947) at 1/1000 dilution + Human colon cancer lysate at 20 µg

Secondary

VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) at 1/1000 dilution

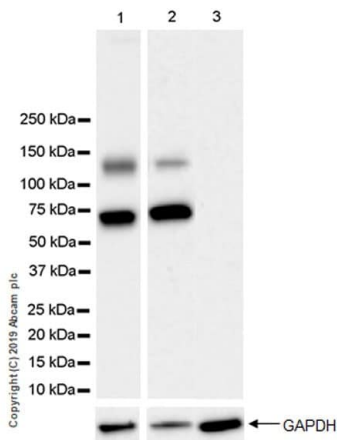
Predicted band size: 92 kDa

Observed band size: 135,70 kDa

Blocking and dilution buffer: 5% NFDm/TBST.

Exposure time: 3 minutes.

The expression profile observed is consistent with what has been described in the literature (PMID: 20551327). Post-translational processing generates a C-terminal 70-kDa fragment from the full-length 135 kDa CDCP1.



Western blot - Anti-CDCP1 antibody [EPR23162-102] (ab252947)

All lanes : Anti-CDCP1 antibody [EPR23162-102] (ab252947) at 1/1000 dilution

Lane 1 : PC-3 (human prostate adenocarcinoma epithelial cell) whole cell lysate

Lane 2 : MDA-MB-231 (human breast adenocarcinoma epithelial cell) whole cell lysate

Lane 3 : MCF7 (human breast adenocarcinoma epithelial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 92 kDa

Observed band size: 135,70 kDa

Blocking and dilution buffer: 5% NFDm/TBST.

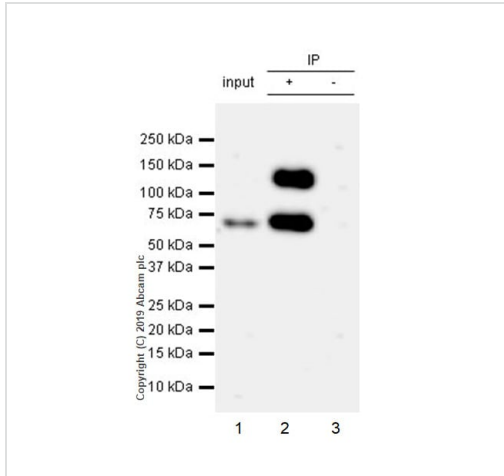
Exposure times.

Lane 1: 48 seconds;

Lanes 2-3: 3 minutes.

The expression profile observed is consistent with what has been described in the literature (PMID: 20551327). Post-translational processing generates a C-terminal 70-kDa fragment from the full-length 135 kDa CDCP1.

Negative control: MCF7 (PMID: 20551327, 24055141).



Immunoprecipitation - Anti-CDCP1 antibody
[EPR23162-102] (ab252947)

CDCP1 was immunoprecipitated from 0.35 mg PC-3 (Human prostate adenocarcinoma epithelial cell) whole cell lysate with ab252947 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab252947 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) was used at 1/5000 dilution.

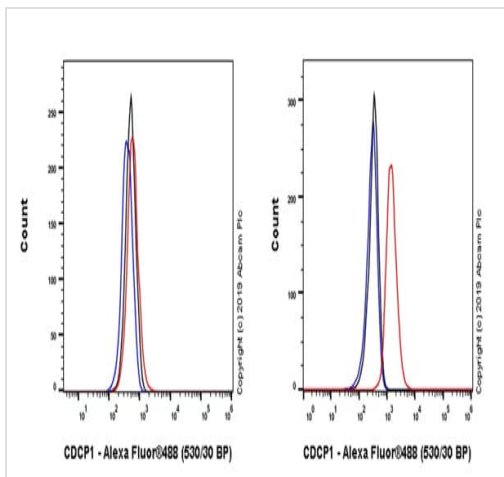
Lane 1: PC-3 (Human prostate adenocarcinoma epithelial cell) whole cell lysate 10ug

Lane 2: ab252947 IP in PC-3 whole cell lysate

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab252947 in PC-3 whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDN/TBST.

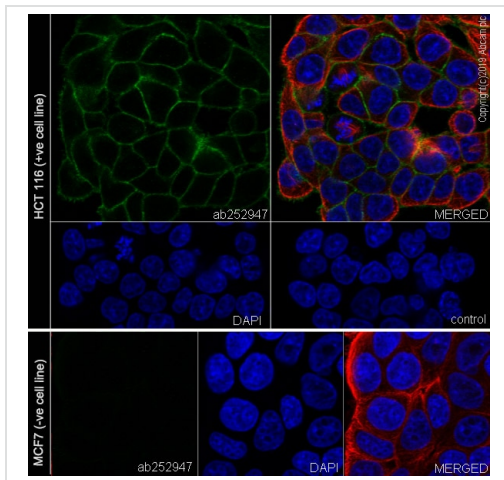
Exposure time: 3 min



Flow Cytometry (Intracellular) - Anti-CDCP1 antibody
[EPR23162-102] (ab252947)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized MCF7 (Human breast adenocarcinoma epithelial cell, Left) / HCT 116 (Human colorectal carcinoma epithelial cell, Right) cells labeling CDCP1 with ab252947 at 1/500 dilution (Red) compared with a isotype control details ([ab172730](#)) (Black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Secondary antibody details ([ab150077](#)), at 1/2000 dilution was used as the secondary antibody.

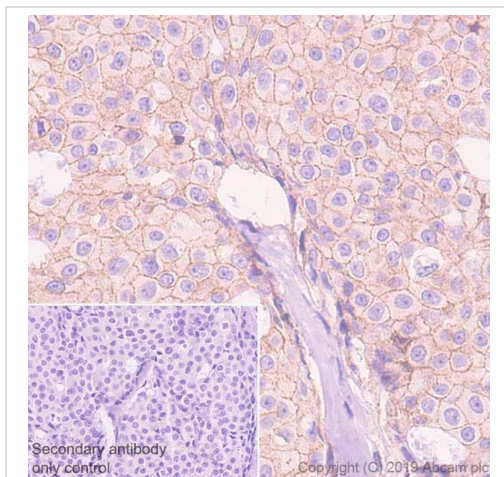
Negative control: MCF7 cell line (PMID: 24055141).



Immunocytochemistry/ Immunofluorescence - Anti-CDCP1 antibody [EPR23162-102] (ab252947)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HCT 116 (Human colorectal carcinoma epithelial cell) MCF7 (Human breast adenocarcinoma epithelial cell) cells labelling CDCEP1 with ab252947 at 1/50 dilution, followed by **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 (2 ug/ml) dilution (Green). Confocal image showing membranous staining in HCT 116 cell line. **Negative control:** MCF7 cell line (PMID: 24055141). **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution.

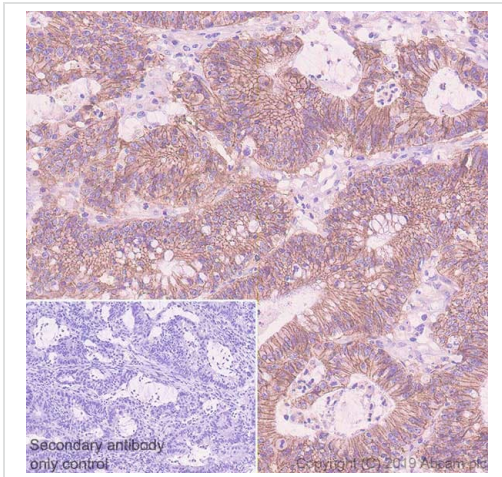


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDCEP1 antibody [EPR23162-102] (ab252947)

Immunohistochemical analysis of paraffin-embedded Human breast cancer tissue labeling CDCEP1 with ab252947 at 1/200 dilution (2.8 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Mainly membranous staining in tumor cells of human breast cancer (PMID: 16823897). The section was incubated with ab252947 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

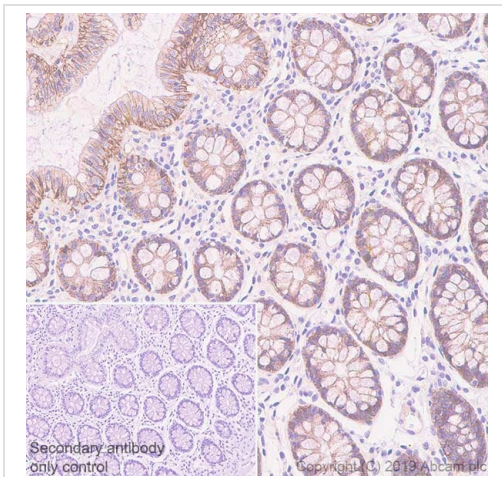


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDCEP1 antibody [EPR23162-102] (ab252947)

Immunohistochemical analysis of paraffin-embedded Human colon cancer tissue labeling CDCEP1 with ab252947 at 1/200 dilution (2.8 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Mainly membranous staining in tumor cells of human colon cancer (PMID: 12660814). The section was incubated with ab252947 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDCEP1 antibody [EPR23162-102] (ab252947)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling CDCEP1 with ab252947 at 1/200 dilution (2.8 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining in human colon (PMID: 12660814). The section was incubated with ab252947 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-CDCP1 antibody [EPR23162-102] (ab252947)

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