

Anti-CDC42 antibody ab155940

★★★★★ [3 Abreviews](#) [12 References](#) [6 Images](#)

Overview

Product name	Anti-CDC42 antibody
Description	Rabbit polyclonal to CDC42
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human, Non human primates, African green monkey
Immunogen	Truncated Human recombinant protein, corresponding to C-terminal amino acid residues in Human CDC42 (P60953).
Positive control	A431, C6, HepG2 and HeLa cells; Human pancreas tissue; HeLa, HepG2, 293T, A431, Jurkat, MCF7, U2-OS, K652, COS7, MEF and 3T3L1 whole cell lysates.
General notes	<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&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 30% Glycerol (glycerin, glycerine), 69% PBS
Purity	Protein A purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab155940 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	★★★★★ (2)	1/1000. Predicted molecular weight: 21 kDa.
IHC-P		1/20. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF	★★★★★ (1)	1/100.

Target

Function

Plasma membrane-associated small GTPase which cycles between an active GTP-bound and an inactive GDP-bound state. In active state binds to a variety of effector proteins to regulate cellular responses. Involved in epithelial cell polarization processes. Causes the formation of thin, actin-rich surface projections called filopodia.

Sequence similarities

Belongs to the small GTPase superfamily. Rho family. CDC42 subfamily.

Post-translational modifications

AMPylation at Tyr-32 and Thr-35 are mediated by bacterial enzymes in case of infection by *H.somnus* and *V.parahaemolyticus*, respectively. AMPylation occurs in the effector region and leads to inactivation of the GTPase activity by preventing the interaction with downstream effectors, thereby inhibiting actin assembly in infected cells. It is unclear whether some human enzyme mediates AMPylation; FICD has such ability in vitro but additional experiments remain to be done to confirm results in vivo.

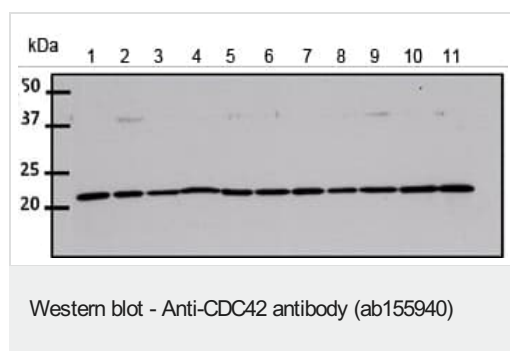
Cellular localization

Cell membrane.

Form

There are 2 isoforms produced by alternative splicing. Isoform 1 also known as: Brain; Isoform 2 also known as: Placental.

Images



All lanes : Anti-CDC42 antibody (ab155940) at 1/1000 dilution

Lane 1 : HeLa whole cell lysate

Lane 2 : HepG2 whole cell lysate

Lane 3 : 293T whole cell lysate

Lane 4 : A431 whole cell lysate

Lane 5 : Jurkat whole cell lysate

Lane 6 : MCF7 whole cell lysate

Lane 7 : U2-OS whole cell lysate

Lane 8 : K526 (Human chronic myelogenous leukemia cell line from bone marrow) whole cell lysate

Lane 9 : COS-7 (African green monkey kidney fibroblast-like cell line) whole cell lysate

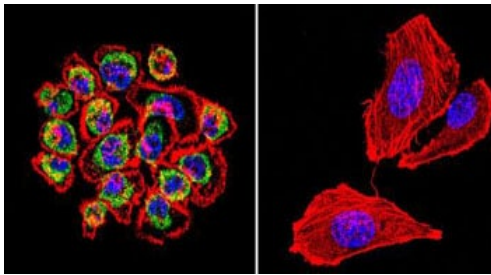
Lane 10 : MEF whole cell lysate

Lane 11 : 3T3L1 whole cell lysate

Lysates/proteins at 50 µg per lane.

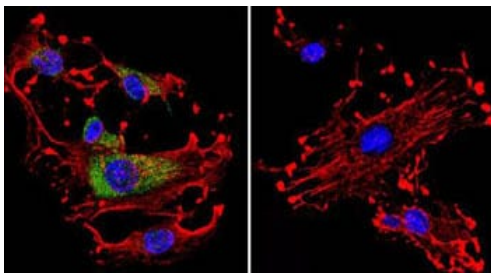
Predicted band size: 21 kDa

4-20% Tris HCl



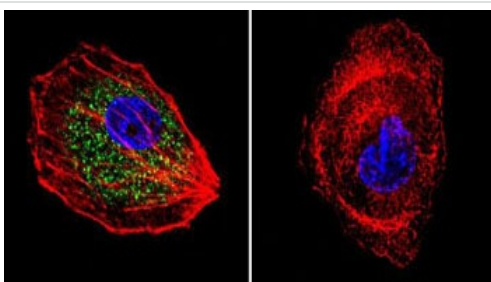
Immunocytochemistry/ Immunofluorescence - Anti-CDC42 antibody (ab155940)

Immunofluorescent analysis of A431 cells, labeling CDC42 with ab155940 at 1/20 dilution. F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is also shown.



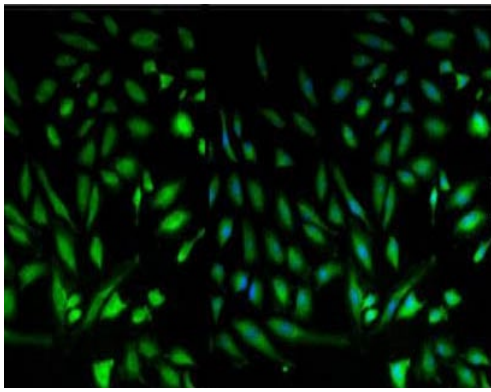
Immunocytochemistry/ Immunofluorescence - Anti-CDC42 antibody (ab155940)

Immunofluorescent analysis of C6 cells, labeling CDC42 with ab155940 at 1/20 dilution. F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is also shown.



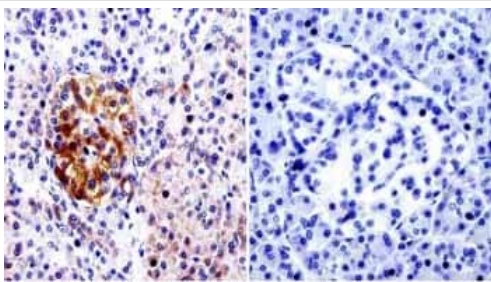
Immunocytochemistry/ Immunofluorescence - Anti-CDC42 antibody (ab155940)

Immunofluorescent analysis of HepG2 cells, labeling CDC42 with ab155940 at 1/200 dilution. F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is also shown.



Immunocytochemistry/ Immunofluorescence - Anti-CDC42 antibody (ab155940)

Immunofluorescent analysis of HeLa cells, labeling CDC42 with ab155940 at 1/100 dilution. Blue: Nuclei stained with Hoechst 33342.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDC42 antibody (ab155940)

Immunohistochemical analysis of deparaffinised Human pancreas tissue, labeling CDC42 with ab155940 at 1/20 dilution. Detection was performed using a biotin conjugated secondary antibody and SA-HRP. Right image is immunohistochemistry performed without primary antibody (negative control).

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