




## Product datasheet

### Anti-CDC42 antibody [M430] ab202280

KO VALIDATED

3 Images

#### Overview

Product name	Anti-CDC42 antibody [M430]
Description	Mouse monoclonal [M430] to CDC42
Host species	Mouse
Specificity	ab202280 does not recognize a full length human RhoA GST fusion protein.
Tested applications	<b>Suitable for:</b> WB, ICC/IF
Species reactivity	<b>Reacts with:</b> Mouse, Rat, Human <b>Predicted to work with:</b> Chicken, Cow, Dog, Pig, Drosophila melanogaster, Cynomolgus monkey 
Immunogen	Recombinant full length protein corresponding to Rat CDC42 aa 1 to the C-terminus. Database link: <a href="#">Q8CFN2</a>  <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a>
Positive control	Jurkat cells and mouse brain lysates; rat A7r5 cells; recombinant full length rat Cdc42 fusion protein.
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&amp;As</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	Preservative: 0.05% Sodium azide Constituents: 50% Glycerol, 0.1% BSA, 49% PBS
Purity	Immunogen affinity purified

<b>Clonality</b>	Monoclonal
<b>Clone number</b>	M430
<b>Isotype</b>	IgM

## Applications

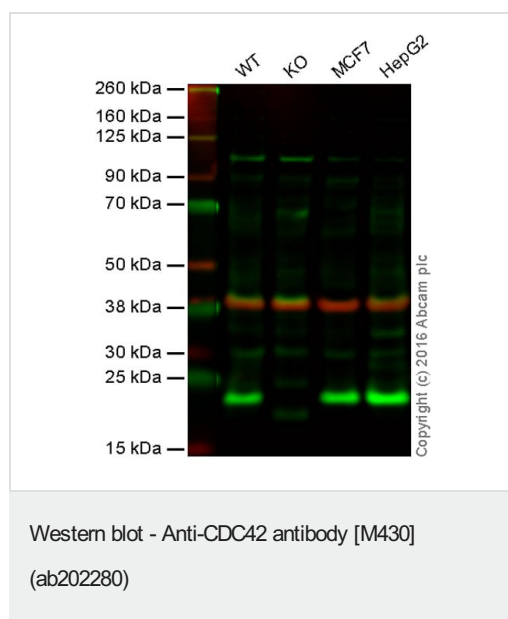
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab202280 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>WB</b>		1/500. Predicted molecular weight: 21 kDa.
<b>ICC/IF</b>		1/200.

## Target

<b>Function</b>	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.
<b>Sequence similarities</b>	Belongs to the small GTPase superfamily. Rho family. CDC42 subfamily.
<b>Post-translational modifications</b>	AMPylation at Tyr-32 and Thr-35 are mediated by bacterial enzymes in case of infection by <i>H.somnus</i> and <i>V.parahaemolyticus</i> , 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.
<b>Cellular localization</b>	Cell membrane.
<b>Form</b>	There are 2 isoforms produced by alternative splicing. Isoform 1 also known as: Brain; Isoform 2 also known as: Placental.

## Images



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

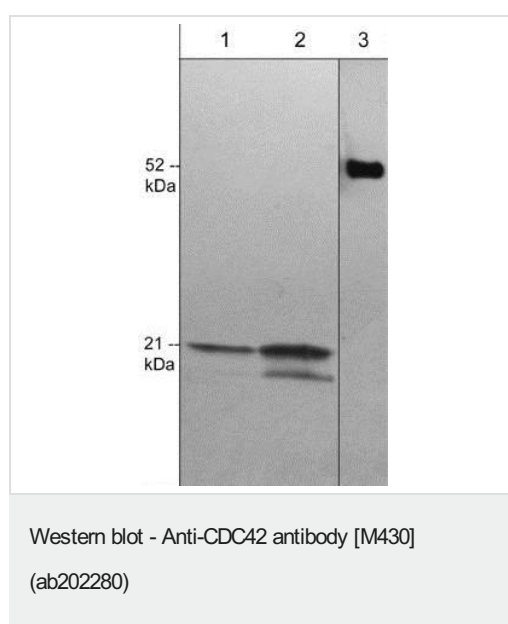
**Lane 2:** CDC42 knockout HAP1 cell lysate (20 µg)

**Lane 3:** MCF7 cell lysate (20 µg)

**Lane 4:** HepG2 cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab202280 observed at 20 kDa. Red - loading control, [ab181602](#), observed at 37 kDa.

ab202280 was shown to recognize CDC42 in wild-type HAP1 cells along with additional cross-reactive bands. No band was observed when CDC42 knockout samples were examined. Wild-type and CDC42 knockout samples were subjected to SDS-PAGE. ab202280 and [ab181602](#) (loading control to GAPDH) were diluted at 1/500 and 1/10,000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed [ab216772](#) and Goat Anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed [ab216777](#) secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



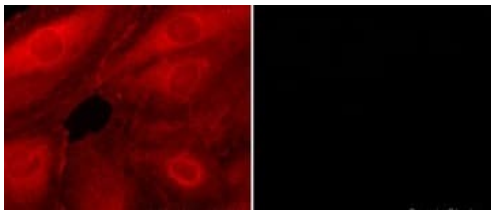
**All lanes :** Anti-CDC42 antibody [M430] (ab202280) at 1/500 dilution

**Lane 1 :** Jurkat cell lysate

**Lane 2 :** mouse brain lysate

**Lane 3 :** Recombinant full length rat Cdc42 protein

**Predicted band size:** 21 kDa



Immunocytochemistry/ Immunofluorescence - Anti-CDC42 antibody [M430] (ab202280)

Immunofluorescence analysis of paraformaldehyde-fixed rat A7r5 cells, labeling CDC42 using ab202280 at a 1/200 dilution, in the absence (left, black protein block) or presence (right, red image) of full length Cdc42 recombinant protein. Goat anti-mouse conjugated to DyLight® 594 was used as secondary antibody.

**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