

Anti-CDC42 antibody [EPR15620] - Low endotoxin, Azide free ab221781

敲除验证
重组
RabMAb

9 图像

概述

产品名称	Anti-CDC42抗体[EPR15620] - Low endotoxin, Azide free
描述	兔单克隆抗体[EPR15620] to CDC42 - Low endotoxin, Azide free
宿主	Rabbit
经测试应用	适用于: IHC-P, ICC/IF, IP, WB, Flow Cyt (Intra)
种属反应性	与反应: Mouse, Rat, Human
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: HEK-293T, MCF7, HepG2, HT-29, Jurkat and HeLa cell lysates. Flow Cyt (intra): HeLa cells. IP: HT-29 cell lysate. ICC/IF: U937 cells. IHC-P: Rat and mouse colon tissues; Human lung and breast carcinoma tissues.
常规说明	ab221781 is the carrier-free version of ab187643 .

Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information [see here](#).

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](#).

Our **Low endotoxin, azide-free formats** have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.
存储溶液	pH: 7.2 Constituent: PBS
无载体	是
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR15620
同种型	IgG

应用

The Abpromise guarantee **Abpromise™** 承诺保证使用 ab221781 于以下的经测试应用

“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。

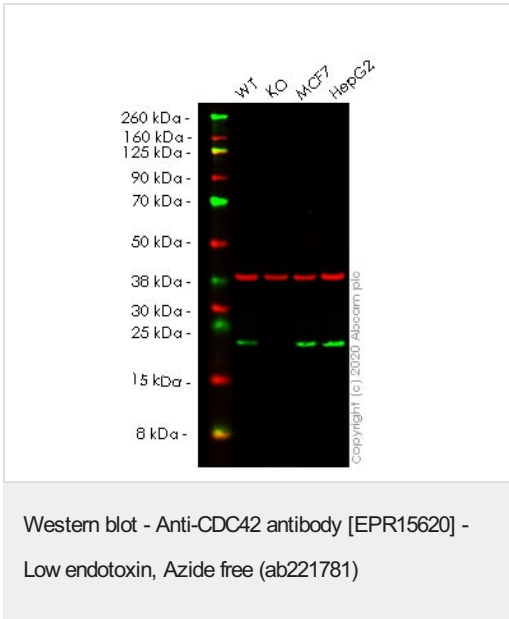
应用	Ab 评论	说明
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 21 kDa (predicted molecular weight: 21 kDa).
Flow Cyt (Intra)		Use at an assay dependent concentration. <u>ab199376</u> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

靶标

功能	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.
----	--

序列相似性	Belongs to the small GTPase superfamily. Rho family. CDC42 subfamily.
翻译后修饰	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.
细胞定位	Cell membrane.
形式	There are 2 isoforms produced by alternative splicing. Isoform 1 also known as: Brain; Isoform 2 also known as: Placental.

图片



All lanes : Anti-CDC42 antibody [EPR15620] ([ab187643](#)) at 1/5000 dilution

- Lane 1 :** Wild-type HEK-293T cell lysate
- Lane 2 :** CDC42 knockout HEK-293T cell lysate
- Lane 3 :** MCF7 cell lysate
- Lane 4 :** HepG2 cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

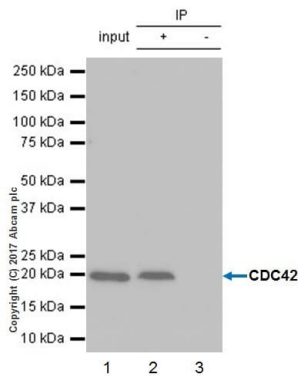
Predicted band size: 21 kDa

This data was developed using the same antibody clone in a different buffer formulation ([ab187643](#)).

Lanes 1-4: Merged signal (red and green). Green - [ab187643](#) observed at 20 kDa. Red - loading control [ab8245](#) observed at 37 kDa.

[ab187643](#) Anti-CDC42 antibody [EPR15620] was shown to specifically react with CDC42 in wild-type HEK-293T cells. Loss of signal was observed when knockout cell line [ab266522](#) (knockout cell lysate [ab256868](#)) was used. Wild-type and CDC42 knockout samples were subjected to SDS-PAGE. [ab187643](#) and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated overnight at 4°C at 1 in 5000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse

IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunoprecipitation - Anti-CDC42 antibody
[EPR15620] - Low endotoxin, Azide free (ab221781)

Lane 1 (input): HT-29 (human colorectal adenocarcinoma epithelial cell) whole cell lysate, 10 µg

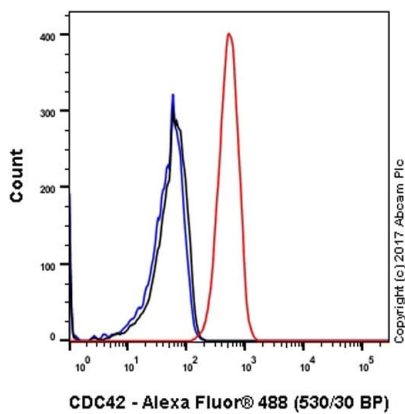
Lane 2(+): HT-29 whole cell lysate

Lane 3(-): Rabbit monoclonal IgG (**ab172730**) instead of **ab187643** in HT-29 whole cell lysate

Ab187643 immunoprecipitates CDC42 in HT-29 whole cell lysate. Capture antibody was used at a 1:60 dilution. For western blotting, **ab187643** was used as the primary antibody at a 1:1000 dilution. Ab131366 Veriblot for IP (HRP) was used for detection at 1/1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST

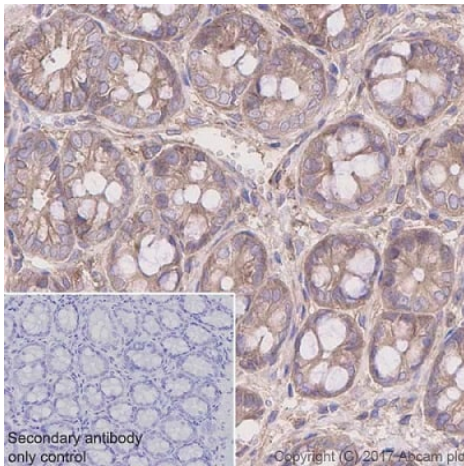
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab187643**).



Flow Cytometry (Intracellular) - Anti-CDC42 antibody
[EPR15620] - Low endotoxin, Azide free (ab221781)

Intracellular Flow Cytometry analysis of HeLa cells (human cervix adenocarcinoma epithelial). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Primary antibody was used at a 1/120 dilution (red). A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (**ab172730**) was used as the isotype control (black). Cell without incubation with primary antibody and secondary antibody (Blue).

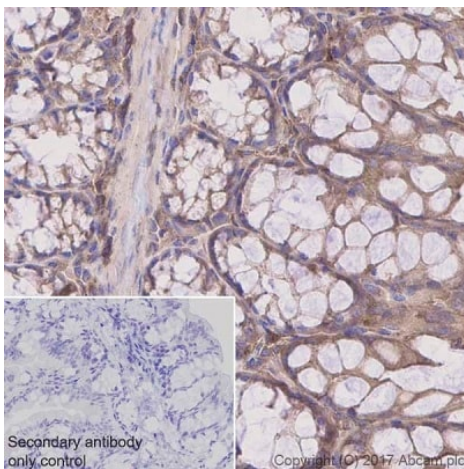
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab187643**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDC42 antibody [EPR15620] - Low endotoxin, Azide free (ab221781)

ab187643 staining CDC42 in Rat colon tissue sections by Immunohistochemistry (IHC-P- paraformaldehyde-fixed, paraffin-embedded sections). Antigen retrieval was by heat mediation using **ab93684** (Tris/EDTA buffer, pH 9.0). Samples were incubated with primary antibody at a 1/500 dilution. A ready to use Goat Anti-Rabbit IgG H&L (HRP) was used as the secondary antibody. Hematoxylin was used as a counter stain. Cytoplasmic staining on rat colon.

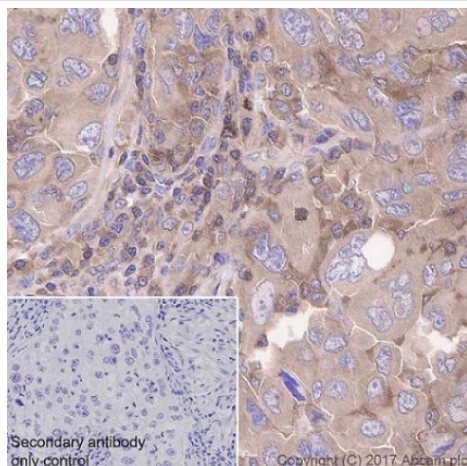
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab187643**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDC42 antibody [EPR15620] - Low endotoxin, Azide free (ab221781)

ab187643 staining CDC42 in Mouse colon tissue sections by Immunohistochemistry (IHC-P- paraformaldehyde-fixed, paraffin-embedded sections). Antigen retrieval was by heat mediation using **ab93684** (Tris/EDTA buffer, pH 9.0). Samples were incubated with primary antibody at a 1/500 dilution. A ready to use Goat Anti-Rabbit IgG H&L (HRP) was used as the secondary antibody. Hematoxylin was used as a counter stain. Cytoplasmic staining on mouse colon.

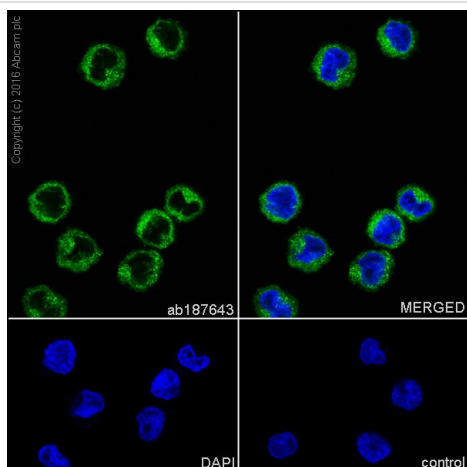
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab187643**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDC42 antibody [EPR15620] - Low endotoxin, Azide free (ab221781)

ab187643 staining CDC42 in Human lung carcinoma tissue sections by Immunohistochemistry (IHC-P- paraformaldehyde-fixed, paraffin-embedded sections). Antigen retrieval was by heat mediation using **ab93684** (Tris/EDTA buffer, pH 9.0). Samples were incubated with primary antibody at a 1/500 dilution. A ready to use Goat Anti-Rabbit IgG H&L (HRP) was used as the secondary antibody. Hematoxylin was used as a counter stain. Cytoplasmic staining on human lung carcinoma.

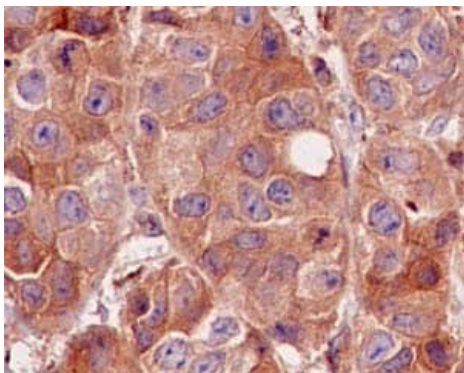
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab187643**).



Immunocytochemistry/ Immunofluorescence - Anti-CDC42 antibody [EPR15620] - Low endotoxin, Azide free (ab221781)

Immunocytochemistry/Immunofluorescence analysis of U937 (Human histiocytic lymphoma cell line) labelling CDC42 with purified **ab187643** at 1/500. Cells were fixed with 4% PFA and permeabilized with 0.1% triton X-100. **ab150077** Goat anti rabbit IgG (Alexa Fluor® 488) at 1/1000 was used as the secondary antibody. Nuclei were counterstained with DAPI. PBS was used instead of the primary antibody as the negative control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab187643**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDC42 antibody [EPR15620] - Low endotoxin, Azide free (ab221781)

Immunohistochemical analysis of paraffin-embedded Human breast carcinoma tissue labeling CDC42 with **ab187643** at 1/250 dilution, followed by prediluted HRP Polymer for Rabbit IgG. Counter stained with Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab187643**).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

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-CDC42 antibody [EPR15620] - Low endotoxin, Azide free (ab221781)

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.cn/abpromise> or contact our technical team.

Terms and conditions

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