abcam

Product datasheet

Anti-IQGAP1 antibody ab110203

敲除验证

1 References 4 图像

概述

产品名称	Anti-IQGAP1抗体
描述	**兔多克隆抗体**to IQGAP1
宿主	Rabbit
经测试应用	**适用于:** ICC/IF, WB, IHC-P
种属反应性	**与反应:** Human **预测可用于:** Dog, Chimpanzee, Macaque monkey, Gorilla, Orangutan
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: Human placenta tissue lysate and HeLa and HEK293 whole cell lysates. IHC-P: Human skin melanoma tissue. ICC/IF: MCF7 cells.
常规说明	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. 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

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
纯度	Immunogen affinity purified

克隆	**多克隆**
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab110203于以下的经测试应用**

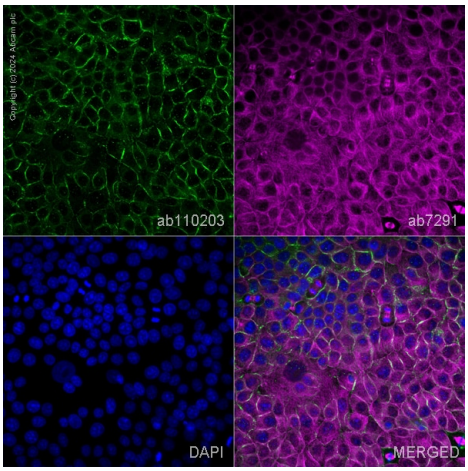
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		Use a concentration of 5 µg/ml.
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 205 kDa (predicted molecular weight: 189 kDa).
IHC-P		Use a concentration of 1 µg/ml.

靶标

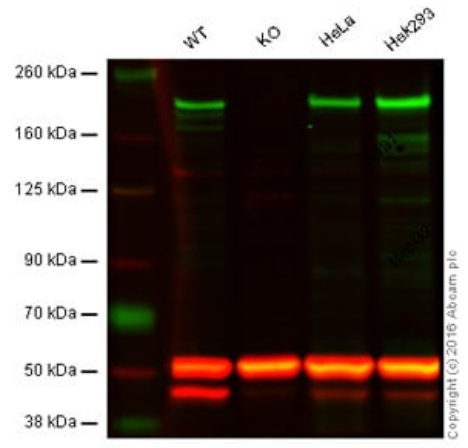
功能	Binds to activated CDC42 but does not stimulate its GTPase activity. It associates with calmodulin. Could serve as an assembly scaffold for the organization of a multimolecular complex that would interface incoming signals to the reorganization of the actin cytoskeleton at the plasma membrane. May promote neurite outgrowth.
组织特异性	Expressed in the placenta, lung, and kidney. A lower level expression is seen in the heart, liver, skeletal muscle and pancreas.
序列相似性	Contains 1 CH (calponin-homology) domain. Contains 4 IQ domains. Contains 1 Ras-GAP domain. Contains 1 WW domain.
结构域	Regions C1 and C2 can either interact with nucleotide-free CDC42, or interact together, depending on the phosphorylation state of Ser-1443. When Ser-1443 is not phosphorylated, C1 and C2 interact, which prevents binding of nucleotide-free CDC42 and promotes binding of GTP-bound CDC42. Phosphorylation of Ser-1443 prevents interaction between C1 and C2, which opens the structure of the C-terminus and allows binding and sequestration of nucleotide-free CDC42 on both C1 and C2.
翻译后修饰	Phosphorylation of Ser-1443 by PKC prevents interaction between C1 and C2, allowing binding of nucleotide-free CDC42. Ser-1443 phosphorylation enhances the ability to promote neurite outgrowth.
细胞定位	Cell membrane.

图片



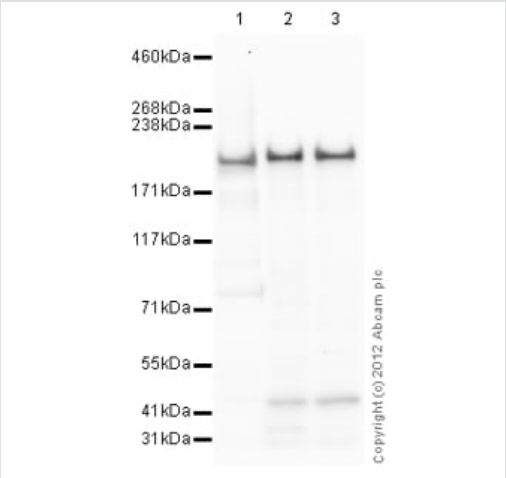
Immunocytochemistry/ Immunofluorescence - Anti-IQGAP1 antibody (ab110203)

ab110203 staining IQGAP1 in MCF7 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Tween for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab110203 at 1µg/ml and **ab7291**, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with **ab150081**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and **ab150120**, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour magenta). Nuclear DNA was labelled with DAPI (shown in blue). Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



Western blot - Anti-IQGAP1 antibody (ab110203)

Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: IQGAP1 knockout HAP1 cell lysate (20 µg)
Lane 3: HeLa cell lysate (20 µg)
Lane 4: HEK293 cell lysate (20 µg)
Lanes 1 - 4: Merged signal (red and green). Green - ab110203 observed at 190 kDa. Red - loading control, **ab7291**, observed at 52 kDa.
ab110203 was shown to specifically react with IQGAP1 when IQGAP1 knockout samples were used. Wild-type and IQGAP1 knockout samples were subjected to SDS-PAGE. ab110203 and **ab7291** (loading control to alpha tubulin) were diluted 1 µg/mL and 1/2000 respectively and incubated overnight at 4°C. Blots were developed withGoat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed **ab216776** secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.



Western blot - Anti-IQGAP1 antibody (ab110203)

All lanes : Anti-IQGAP1 antibody (ab110203) at 1 µg/ml

Lane 1 : Human placenta tissue lysate - total protein (**ab29745**)
Lane 2 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate
Lane 3 : HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

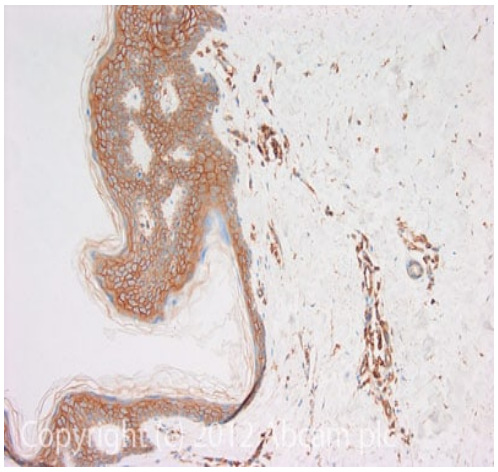
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 189 kDa
Observed band size: 205 kDa
Additional bands at: 45 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 1 minute



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IQGAP1 antibody (ab110203)

IHC image of IQGAP1 staining in Human skin melanoma formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab110203, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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