abcam

Product datasheet

Anti-IQGAP1 antibody ab110203



1 References 画像数 4

製品の概要

免疫原

製品名 Anti-IQGAP1 antibody

製品の詳細 Rabbit polyclonal to IQGAP1

由来種 Rabbit

アプリケーション 適用あり: ICC/IF, WB, IHC-P

種交差性 交差種: Human

交差が予測される動物種: Dog, Chimpanzee, Macaque monkey, Gorilla, Orangutan 4

Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: Human placenta tissue lysate and HeLa and HEK293 whole cell lysates. IHC-P: Human skin

melanoma tissue. ICC/IF: MCF7 cells.

特記事項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

製品の特性

製品の状態 Liquid

保存方法 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.

バッファー 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.

精製度 Immunogen affinity purified

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ポリ/モノ ポリクローナル

アイソタイプ IgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab110203の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
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.

ターゲット情報

機能 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.

組織特異性 Expressed in the placenta, lung, and kidney. A lower level expression is seen in the heart, liver,

skeletal muscle and pancreas.

配列類似性 Contains 1 CH (calponin-homology) domain.

Contains 4 IQ domains.
Contains 1 Ras-GAP domain.
Contains 1 WW domain.

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.

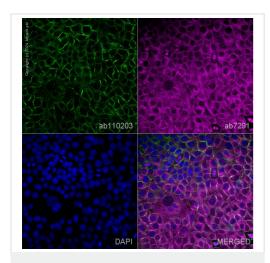
翻訳後修飾 Phosphorylation of Ser-1443 by PKC prevents interaction between C1 and C2, allowing binding

of nucleotide-free CDC42. Ser-1443 phosphorylation enhances the ability to promote neurite

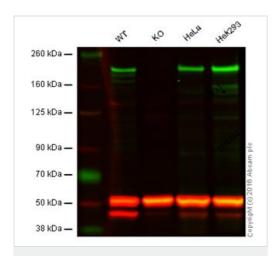
outgrowth.

細胞内局在 Cell membrane.

画像



Immunocytochemistry/ Immunofluorescence - Anti-IQGAP1 antibody (ab110203)



Western blot - 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.

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

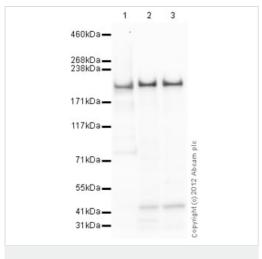
Lane 2: IQGAP1 knockout HAP1 cell lysate (20 µg)

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, <u>ab7291</u>, 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 μ g/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.

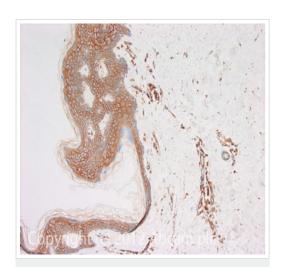
Performed under reducing conditions.

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 paraffinembedded 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 pretreated 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.

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