abcam

Product datasheet

Anti-IQGAP1 antibody [EPR5220] ab133490



יעלטעבע RabMAb

12 References 画像数6

製品の概要

製品名 Anti-IQGAP1 antibody [EPR5220]

製品の詳細 Rabbit monoclonal [EPR5220] to IQGAP1

由来種 Rabbit

アプリケーション 適用あり: Flow Cyt (Intra), WB, IHC-P, ICC/IF

適用なし: №

種交差性 交差種: Mouse, Human

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

ポジティブ・コントロール HeLa, 293T, Human placenta, Mouse thymus and F9 cell lysates; Human kidney tissue

特記事項 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.

Rat: We have preliminary internal testing data to indicate this antibody may not react with this

species. Please contact us for more information.

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.

Stable for 12 months at -20°C.

バッファー pH: 7.2

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

精製度 Tissue culture supernatant

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ab133490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
Flow Cyt (Intra)		Use at an assay dependent concentration. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/10000. Detects a band of approximately 195 kDa (predicted molecular weight: 189 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/50 - 1/100.

追加情報 Is unsuitable for IP.

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.

ドメイン 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

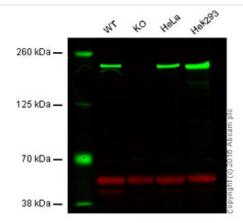
CDC42 on both C1 and C2.

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

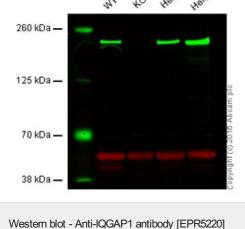
of nucleotide-free CDC42. Ser-1443 phosphorylation enhances the ability to promote neurite

outgrowth.

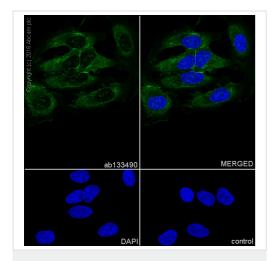
細胞内局在 Cell membrane.



(ab133490)



Immunocytochemistry/Immunofluorescence analysis of HeLa (Human epithelial cell line from cervix adenocarcinoma) labeling IQGAP1 with Purified ab133490 at 1/500 dilution (5 µg/ml). Cells were fixed with 100% methanol. ab150077 Goat anti rabbit lgG(Alexa Fluor® 488) at 1/1000 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI. PBS was used instead of the primary antibody as the negative control.



Immunocytochemistry/ Immunofluorescence - Anti-IQGAP1 antibody [EPR5220] (ab133490)

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

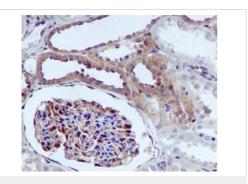
Lane 2: IQGAP knockout HAP1 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

Lane 4: HEK293 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab133490 observed at 190 kDa. Red - loading control, ab7291, observed at 52 kDa.

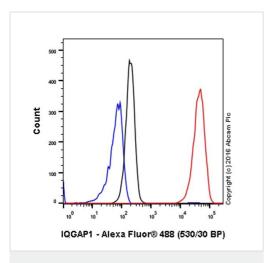
ab133490 was shown to specifically react with IQGAP1 when IQGAP1 knockout samples were used. Wild-type and IQGAP1 knockout samples were subjected to SDS-PAGE. ab133490 and ab7291 (loading control to alpha tubulin) were diluted 1/1000 and 1/2000 and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1/10 000 dilution for 1 h at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-IQGAP1 antibody
[EPR5220] (ab133490)

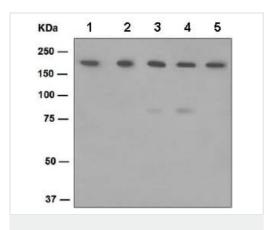
Immunohistochemical analysis of IQGAP1 in paraffin embedded Human kidney tissue, using ab133490 at a dilution of 1/100.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-IQGAP1 antibody [EPR5220] (ab133490)

Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling IQGAP1 with unpurified ab133490 at 1/20 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor[®] 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



Western blot - Anti-IQGAP1 antibody [EPR5220] (ab133490)

All lanes : Anti-IQGAP1 antibody [EPR5220] (ab133490) at 1/1000 dilution

Lane 1 : HeLa cell lysate

Lane 2: 293T cell lysate

Lane 3 : Human placenta lysate
Lane 4 : Mouse thymus lysate

Lane 5: F9 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 189 kDa **Observed band size:** 195 kDa



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