abcam

Product datasheet

Anti-IQGAP1 antibody [EPR5221] ab109292





重组 RabMAb

4 References 6 图像

概述

产品名称 Anti-IQGAP1抗体[EPR5221]

描述 兔单克隆抗体[EPR5221] to IQGAP1

宿主 Rabbit

经测试应用 适用于: ICC/IF, WB, IHC-P, Flow Cyt (Intra)

不适用于: №

种属反应性 与反应: Human, African green monkey

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

阳性对照 HeLa, COS-1, HUVEC, and Jurkat cell lysates, Human uterus tissue

常规说明 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.

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

these species. Please contact us for more information.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

存储溶液

Preservative: 0.05% Sodium azide

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

culture supernatant

纯度 Protein A purified

克隆 单克隆

克隆编号 EPR5221

同种型 IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab109292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 at an assay dependent concentration.
WB		1/1000 - 1/10000. Detects a band of approximately 195 kDa (predicted molecular weight: 189 kDa).
IHC-P		1/500 - 1/1000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
Flow Cyt (Intra)		Use at an assay dependent concentration.

应用说明 Is unsuitable for IP.

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.

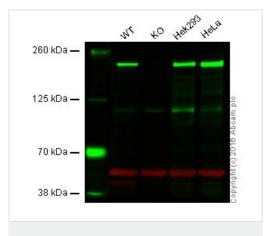
翻译后修饰 Phosphorylation of Ser-1443 by PKC prevents interaction between C1 and C2, allowing binding

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

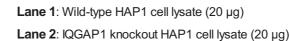
outgrowth.

细**胞定位** Cell membrane.

图片



Western blot - Anti-IQGAP1 antibody [EPR5221] (ab109292)

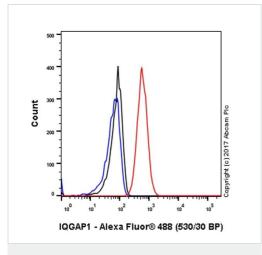


Lane 3: HEK293 cell lysate (20 µg)

Lane 4: HeLa cell lysate (20 µg)

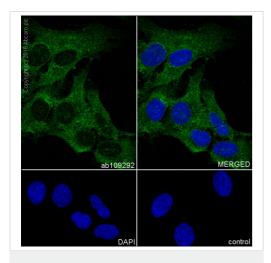
Lanes 1 - 4: Merged signal (red and green). Green - ab109292 observed at 190 kDa. Red - loading control, **ab7291**, observed at 52 kDa.

ab109292 was shown to specifically react with IQGAP1 when IQGAP1 knockout samples were used. Wild-type and IQGAP1 knockout samples were subjected to SDS-PAGE. ab109292 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 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.



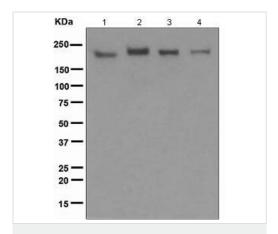
Flow Cytometry (Intracellular) - Anti-IQGAP1 antibody [EPR5221] (ab109292)

Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling IQGAP1 with unpurified ab109292 at 1/250 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.



Immunocytochemistry/ Immunofluorescence - Anti-IQGAP1 antibody [EPR5221] (ab109292)

Immunocytochemistry/Immunofluorescence analysis of HeLa (Human epithelial cell line from cervix adenocarcinoma) labeling IQGAP1 with Purified ab109292 at 1/500 dilution (5 µg/ml). Cells were fixed with 100% methanol. ab150077 Goat anti rabbit IgG(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.



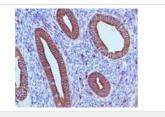
Western blot - Anti-IQGAP1 antibody [EPR5221] (ab109292)

All lanes : Anti-IQGAP1 antibody [EPR5221] (ab109292) at 1/1000 dilution

Lane 1 : HeLa cell lysate
Lane 2 : Cos-1 cell lysate
Lane 3 : HUVEC cell lysate
Lane 4 : Jurkat cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 189 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-IQGAP1 antibody
[EPR5221] (ab109292)

Immunohistochemical analysis of paraffin-embedded Human uterus tissue using ab109292 at a dilution of 1/500.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



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