

### Anti-IQGAP1 antibody [EPR5220] ab133490

敲除验证 重组 RabMAb

[12 References](#) [6 图像](#)

#### 概述

产品名称	Anti-IQGAP1抗体[EPR5220]
描述	兔单克隆抗体[EPR5220] to IQGAP1
宿主	Rabbit
经测试应用	适用于: Flow Cyt (Intra), WB, IHC-P, ICC/IF 不适用于: IP
种属反应性	与反应: Mouse, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	HeLa, 293T, Human placenta, Mouse thymus and F9 cell lysates; Human kidney 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 <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .  Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

#### 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. Stable for 12 months at -20°C.
存储溶液	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
纯度	Tissue culture supernatant

克隆	单克隆
克隆编号	EPR5220
同种型	IgG

## 应用

**The Abpromise guarantee** **Abpromise™**承诺保证使用ab133490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。

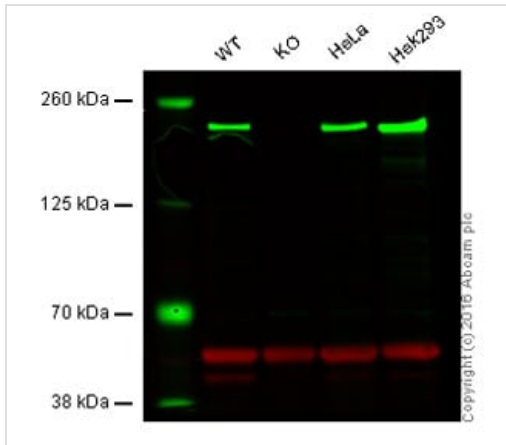
应用	Ab评论	说明
Flow Cyt (Intra)		Use at an assay dependent concentration. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/10000. Detects a band of approximately 195 kDa (predicted molecular weight: 189 kDa).
IHC-P		1/100 - 1/250. Perform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

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 [EPR5220] (ab133490)

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

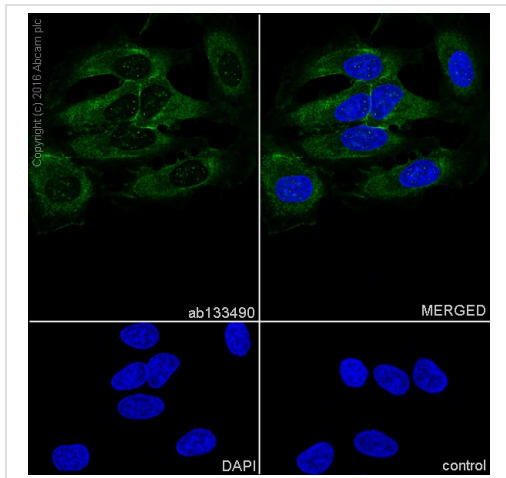
**Lane 2:** IQGAP1 knockout HAP1 cell lysate (20 µg)

**Lane 3:** HeLa cell lysate (20 µg)

**Lane 4:** HEK293 cell lysate (20 µg)

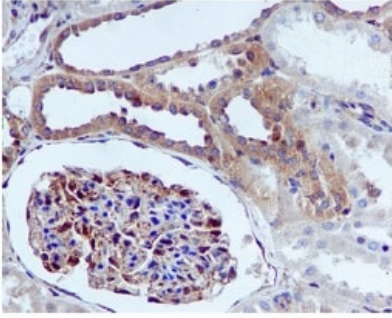
**Lanes 1 - 4:** Merged signal (red and green). Green - ab133490 observed at 190 kDa. Red - loading control, **ab7291**, observed at 52 kDa.

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 IgG 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.



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

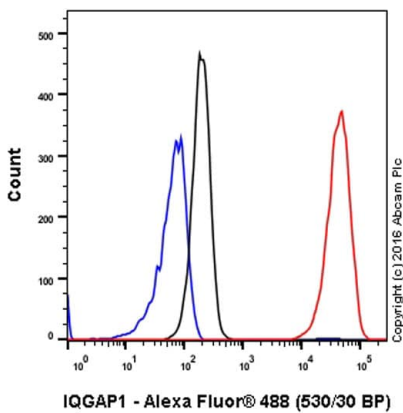
Immunocytochemistry/Immunofluorescence analysis of HeLa (Human epithelial cell line from cervix adenocarcinoma) labeling IQGAP1 with Purified ab133490 at 1/500 dilution (5 µg/ml). Cells were fixed with 100% methanol. **ab150077** Goat anti rabbit IgG(Alexa Fluor® 488) at 1/1000 dilution was used as the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



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

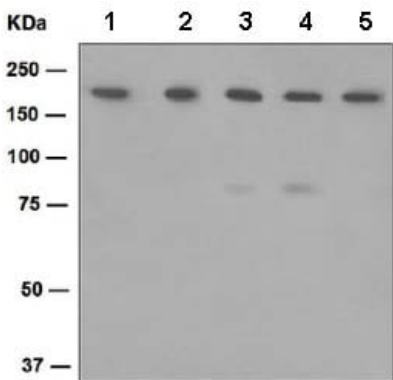
Immunohistochemical analysis of IQGAP1 in paraffin embedded Human kidney tissue, using ab133490 at a dilution of 1/100.

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

### 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-IQGAP1 antibody [EPR5220] (ab133490)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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