abcam

Product datasheet

Alexa Fluor® 555 Anti-IQGAP1 antibody [EPR5220] ab216899

Recombinant RabMAb

2 Images

Overview

Product name Alexa Fluor® 555 Anti-IQGAP1 antibody [EPR5220]

Description Alexa Fluor® 555 Rabbit monoclonal [EPR5220] to IQGAP1

Host species Rabbit

Conjugation Alexa Fluor® 555. Ex: 555nm. Em: 565nm

Tested applications Suitable for: ICC/IF Species reactivity Reacts with: Human

Predicted to work with: Mouse

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

Positive control ICC/IF: HeLa cells

General notes 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**.

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Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Store In the Dark.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS

Purity Protein A purified

ClonalityMonoclonalClone numberEPR5220

Isotype IgG

Applications

Post-translational

The Abpromise guarantee Our Abpromise guarantee covers the use of ab216899 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/1000. This product gave a positive signal in HeLa cells fixed with 4% formaldehyde (10 min)

Target	
Function	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.
Tissue specificity	Expressed in the placenta, lung, and kidney. A lower level expression is seen in the heart, liver, skeletal muscle and pancreas.
Sequence similarities	Contains 1 CH (calponin-homology) domain. Contains 4 IQ domains. Contains 1 Ras-GAP domain. Contains 1 WW domain.
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

CDC42 on both C1 and C2.

opens the structure of the C-terminus and allows binding and sequestration of nucleotide-free

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

modifications

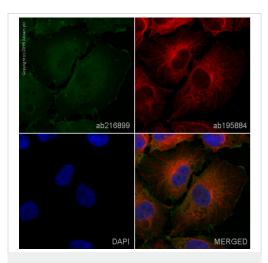
of nucleotide-free CDC42. Ser-1443 phosphorylation enhances the ability to promote neurite

outgrowth.

Cellular localization

Cell membrane.

Images



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 555 Anti-IQGAP1 antibody [EPR5220] (ab216899)

ab216899 staining IQGAP1 in HeLa cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 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 ab216899 at 1/1000 dilution (pseudocolored in green) and ab195884, Rat monoclonal to Tubulin (Alexa Fluor® 647), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



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