

IQGAP1 Rabbit pAb

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Catalog # AP52210

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P46940
Reactivity	Rat, Human, Rabbit
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	189252
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human IQGAP1
Epitope Specificity	1451-1550/1657
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	IQGAP1 is a widely expressed protein that interacts with components of the cytoskeleton, with cell adhesion molecules, and with several signaling molecules to regulate cell morphology. It 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.

Additional Information

Gene ID	8826
Other Names	Ras GTPase-activating-like protein IQGAP1, p195, IQGAP1, KIAA0051
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=2ug/Test
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	IQGAP1
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Synonyms

KIAA0051

Function

Plays a crucial role in regulating the dynamics and assembly of the actin cytoskeleton. Recruited to the cell cortex by interaction with ILK which allows it to cooperate with its effector DIAPH1 to locally stabilize microtubules and allow stable insertion of caveolae into the plasma membrane (By similarity). Binds to activated CDC42 but does not stimulate its GTPase activity. Associates with calmodulin. May promote neurite outgrowth (PubMed:[15695813](#)). May play a possible role in cell cycle regulation by contributing to cell cycle progression after DNA replication arrest (PubMed:[20883816](#)).

Cellular Location

Cell membrane. Nucleus. Cytoplasm. Cytoplasm, cell cortex {ECO:0000250|UniProtKB:Q9JKF1}. Apical cell membrane. Basolateral cell membrane {ECO:0000250|UniProtKB:Q9JKF1}. Note=Subcellular distribution is regulated by the cell cycle, nuclear levels increase at G1/S phase (PubMed:20883816).

Tissue Location

Expressed in the placenta, lung, and kidney (PubMed:8051149). A lower level expression is seen in the heart, liver, skeletal muscle and pancreas (PubMed:8051149)

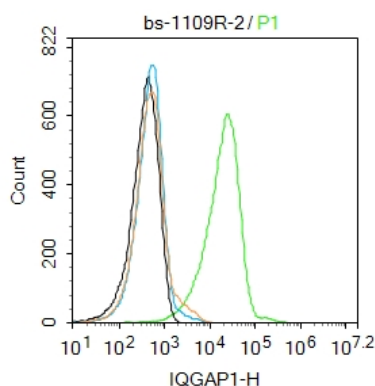
Background

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References

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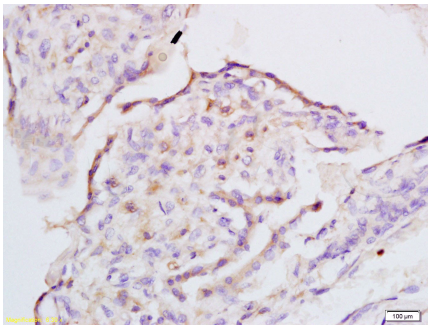
Images



Blank control: U87MG.
Primary Antibody (green line): Rabbit Anti-IQGAP1 antibody (AP52210)
Dilution: 2ug/Test;
Secondary Antibody : Goat anti-rabbit IgG-FITC
Dilution: 0.5ug/Test.
Protocol

The cells were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

Tissue/cell: rabbit placenta tissue; 4%
Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling



bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-IQGAP1 Polyclonal Antibody, Unconjugated(AP52210) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.