

IQGAP1 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51287

Specification

IQGAP1 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, E <u>P46940</u> Human, Mouse, Rat Rabbit Polyclonal 190 KDa

IQGAP1 Antibody - Additional Information

Gene ID 8826

Other Names Ras GTPase-activating-like protein IQGAP1, p195, IQGAP1, KIAA0051

Dilution WB~~1:1000 E~~N/A

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

IQGAP1 Antibody - Protein Information

Name IQGAP1

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)

IQGAP1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IQGAP1 Antibody - Images

IQGAP1 Antibody - Background

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.

IQGAP1 Antibody - References

Weissbach L., et al.J. Biol. Chem. 269:20517-20521(1994). Nomura N., et al.DNA Res. 1:223-229(1994). Mural R.J., et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Bienvenut W.V., et al.Submitted (MAR-2009) to UniProtKB. Grohmanova K., et al.J. Biol. Chem. 279:48495-48504(2004).