Product Name: IQGAP1 Rabbit Polyclonal Antibody
Catalog #: APRab12720
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC
Reactivity	Human,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:50-1:300
Molecular Weight	190kDa

Antigen Information

Gene Name	IQGAP1
Alternative Names	IQGAP1; KIAA0051; Ras GTPase-activating-like protein IQGAP1; p195
Gene ID	8826.0
SwissProt ID	P46940
Immunogen	The antiserum was produced against synthesized peptide derived from human IQGAP1. AA range:247-296

Background

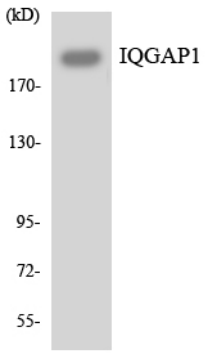
IQ motif containing GTPase activating protein 1(IQGAP1) Homo sapiens This gene encodes a member of the IQGAP family.

The protein contains four IQ domains, one calponin homology domain, one Ras-GAP domain and one WW domain. It interacts with components of the cytoskeleton, with cell adhesion molecules, and with several signaling molecules to regulate cell morphology and motility. Expression of the protein is upregulated by gene amplification in two gastric cancer cell lines. [provided by RefSeq, Jul 2008],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 opens the structure of the C-terminus and allows binding and sequestration of nucleotide-free CDC42 on both C1 and C2.,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.,PTM: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.,similarity:Contains 1 CH (calponin-homology) domain.,similarity:Contains 1 Ras-GAP domain.,similarity:Contains 1 WW domain.,similarity:Contains 4 IQ domains.,subunit:Interacts with CDC42; the interaction is demonstrated with IQGAP1 in GTP-bound and in nucleotide-free state. Interacts with RAC1. Does not interact with RHOA. Interacts with TSG101.,tissue specificity:Expressed in the placenta, lung, and kidney. A lower level expression is seen in the heart, liver, skeletal muscle and pancreas.,

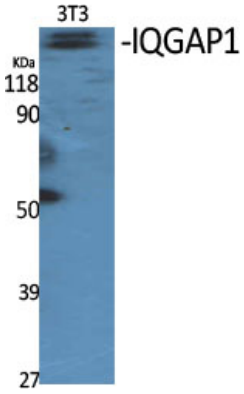
Research Area

Adherens_Junction;Regulates Actin and Cytoskeleton;

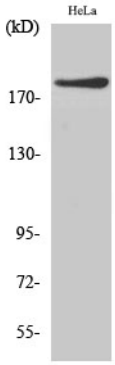
Image Data



Western blot analysis of the lysates from K562 cells using IQGAP1 antibody.



Western Blot analysis of various cells using IQGAP1 Polyclonal Antibody diluted at 1 : 1000



Western Blot analysis of HeLa cells using IQGAP1 Polyclonal Antibody diluted at 1: 1000