

Rabbit anti-Human, Mouse IQGAP1 Polyclonal Antibody | anti-IQGAP1 antibody

IQGAP1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA325041	Rabbit	Human, Mouse	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

IQGAP1; Polyclonal Antibody; IQGAP1 Antibody; HUMORFA01; IQ motif containing GTPase activating protein 1; IQGA1_HUMAN; Iqgap1; KIAA0051; p195; Ras GTPase activating like protein 1; Ras GTPase-activating-like protein IQGAP1; RasGAP-like with IQ motifs; SAR1; anti-IQGAP1 antibody

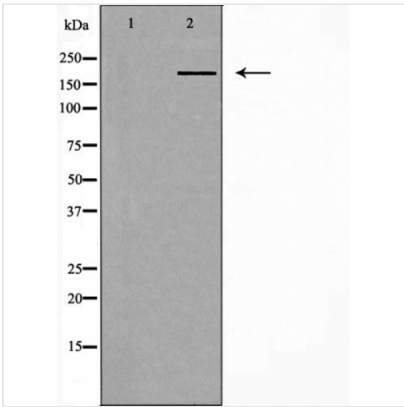
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Specificity	IQGAP1 antibody detects endogenous levels of total IQGAP1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	1657
Applicable Applications for anti-IQGAP1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Cell Membrane
Tissue Specificity	Expressed in the placenta, lung, and kidney. A lower level expression is seen in the heart, liver, skeletal muscle and pancreas.
Predicted Cross Reactivity	Pig, Bovine, Sheep, Rabbit, Dog
Similarity	Pig (92%), Bovine (83%), Sheep (85%), Rabbit (100%), Dog (92%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

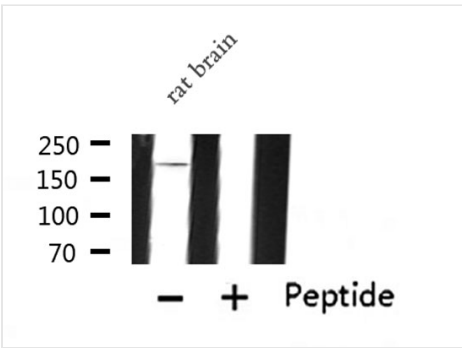
IMAGES



IF (Immunofluorescence)
AAA325041 staining HeLa cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



WB (Western Blot)
Western blot analysis of extracts from HeLa cells, using IQGAP1 antibody. The lane on the left is treated with the antigen-specific peptide.



WB (Western Blot)
Western blot analysis of IQGAP1 expression in Rat brain lysate

ADDITIONAL INFORMATION

Related Product Information for anti-IQGAP1 antibody

Function: Plays a crucial role in regulating the dynamics and assembly of the actin cytoskeleton. 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 (PubMed:15695813). May play a possible role in cell cycle regulation by contributing to cell cycle progression after DNA replication arrest (PubMed:20883816).

Subunit Structure: Interacts with CDC42; the interaction is demonstrated with IQGAP1 in GTP-bound and in nucleotide-free state (PubMed:15355962). Interacts with RAC1 (PubMed:15355962). Does not interact with RHOA. Interacts with TSG101 (PubMed:17853893). Interacts with PAK6 (PubMed:18642328). Interacts with TMEM14B; this interaction increases IQGAP1 phosphorylation and induces its nuclear translocation (PubMed:29033352).

Post-translational Modifications: Phosphorylation of Ser-1443 by PKC/PRKCE prevents interaction between C1 and C2, allowing binding of nucleotide-free CDC42. Ser-1443 phosphorylation enhances the ability to promote neurite outgrowth.

Similarity: 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.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4506787
NCBI GeneID	8826
NCBI Accession #	NP_003861.1

NCBI GenBank Nucleotide #	NM_003870.3
UniProt Accession #	P46940; A7MBM3
Molecular Weight	Observed: 190 kD Predicted: 190 kDa
NCBI Official Full Name	ras GTPase-activating-like protein IQGAP1
NCBI Official Synonym Full Names	IQ motif containing GTPase activating protein 1
NCBI Official Symbol	IQGAP1
NCBI Official Synonym Symbols	SAR1; p195; HUMORFA01
NCBI Protein Information	ras GTPase-activating-like protein IQGAP1
UniProt Protein Name	Ras GTPase-activating-like protein IQGAP1
UniProt Gene Name	IQGAP1
UniProt Synonym Gene Names	KIAA0051

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/iqgap1-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/325041>