

Product datasheet for RC218549

IQGAP1 (NM_003870) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: IQGAP1 (NM_003870) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: IQGAP1
Synonyms: HUMORFA01; p195; SAR1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC218549 representing NM_003870
 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence:

>RC218549 representing NM_003870
Red=Cloning site Green=Tags(s)

MSAAEVDGLGVARPHYGSVLDNERLTAEMDERRRQNVAYEYLCHLEEAKRWMEACLGEDLPPTTELEE
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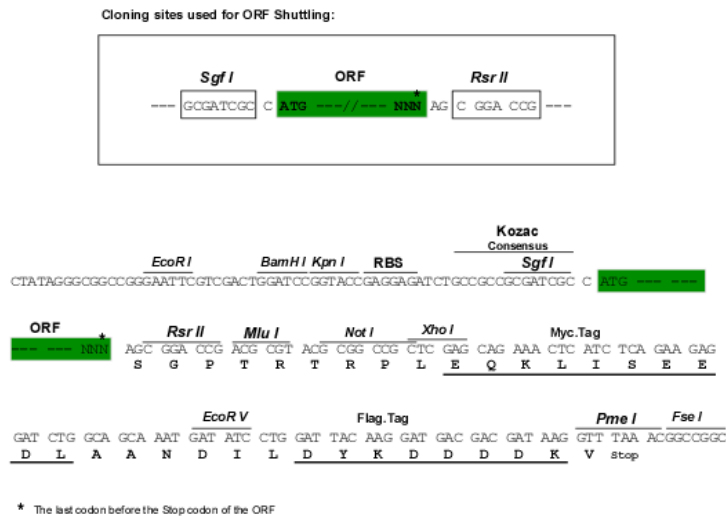
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Chromatograms:

https://cdn.origene.com/chromatograms/mk6864_e04.zip

Restriction Sites:

SgfI-RsrII

Cloning Scheme:


ACCN: NM_003870

ORF Size: 4971 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_003870.4](#)

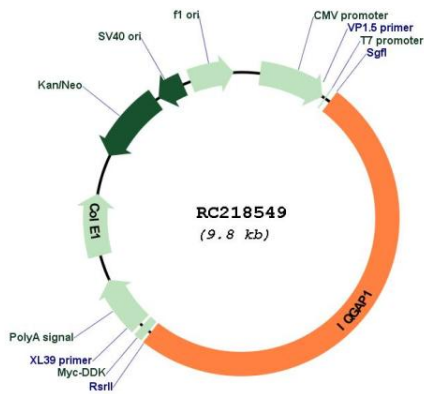
RefSeq Size: 7219 bp

RefSeq ORF: 4974 bp

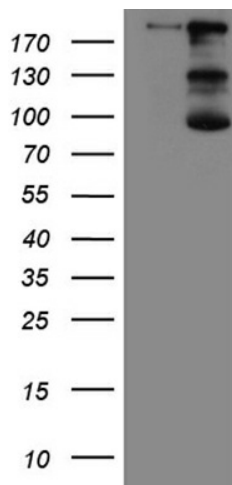
Locus ID: 8826

UniProt ID:	<u>P46940</u>
Cytogenetics:	15q26.1
Domains:	IQ, RasGAP_C, WW, CH, RasGAP
Protein Families:	Druggable Genome
Protein Pathways:	Adherens junction, Regulation of actin cytoskeleton
MW:	189.1 kDa
Gene Summary:	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]

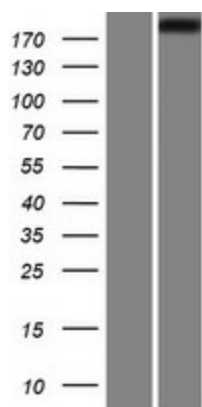
Product images:



Circular map for RC218549



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY IQGAP1 (Cat# RC218549, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-IQGAP1 (Cat# [TA809922])(1:2000). Positive lysates [LY418380] (100ug) and [LC418380] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY418380]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218549 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).