

## Product datasheet for **RC223783**

### **IQGAP2 (NM\_006633) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	IQGAP2 (NM_006633) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	IQGAP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223783 representing NM_006633 Red=Cloning site Blue=ORF Green=Tags(s)

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**Protein Sequence:** >RC223783 representing NM\_006633  
 Red=Cloning site Green=Tags(s)

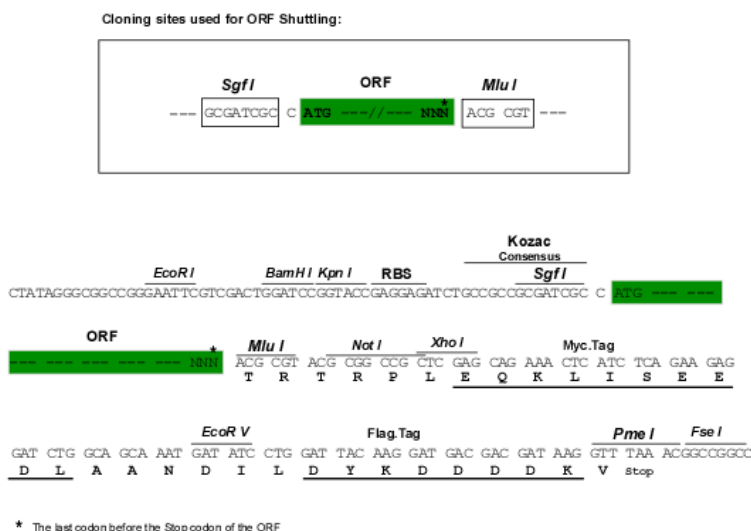
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**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8046\\_h10.zip](https://cdn.origene.com/chromatograms/mk8046_h10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

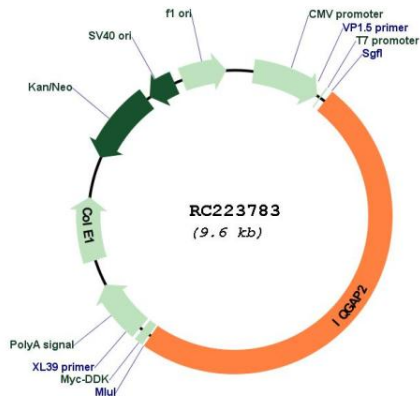


**ACCN:** NM\_006633

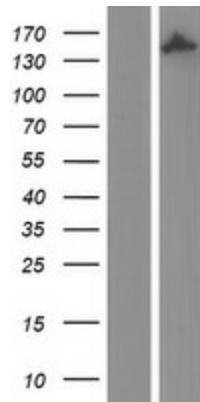
<b>ORF Size:</b>	4725 bp
<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_006633.1</a> , <a href="#">NP_006624.1</a>
<b>RefSeq Size:</b>	5767 bp
<b>RefSeq ORF:</b>	4728 bp
<b>Locus ID:</b>	10788
<b>UniProt ID:</b>	<a href="#">Q13576</a>
<b>Cytogenetics:</b>	5q13.3
<b>Domains:</b>	IQ, RasGAP_C, CH, RasGAP
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Regulation of actin cytoskeleton
<b>MW:</b>	180.4 kDa

**Gene Summary:**

This gene encodes a member of the IQGAP family. The encoded protein contains three IQ domains, one calponin homology domain, one Ras-GAP domain and one WW domain. This protein interacts with components of the cytoskeleton, with cell adhesion molecules, and with several signaling molecules to regulate cell morphology and motility. It also acts as a tumor suppressor and has been found to play a role in regulating innate antiviral responses. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2017]

**Product images:**


Circular map for RC223783



Western blot validation of overexpression lysate (Cat# [LY416521]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223783 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).