

## Product datasheet for **MR230661**

### **Rap1gds1 (NM\_001286759) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Rap1gds1 (NM_001286759) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rap1gds1
Synonyms:	BC011279; GDS1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>MR230661 representing NM\_001286759  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGATAACCTCAGTGACACTTTAAAGAAGCTGAAGATAACAGCTGCTGACAGGACAGAGGGCAGTCTGG  
 AAGGATGCTTGGATTGTCTGCTTCAAGCCTTGGCTCAGAATAATGCAGAAACAAGTGAAAAATACAAGG  
 AAGTGAATTCTTCAGTTGTTTGCAAACTGTGTGACGCCACAGGCCTCCTGCACAGCCAAAAGTAGCCGAC  
 ATCATAGCAGAAGTAGCCAAAAATGAATTTATGCGAATCCCATGTGTAGATGCTGGATTGATTTACCAC  
 TGGTACAGCTGTTAAATAGCAAAGACCAGGAAGTGTCTTCAAACGGGCAGGGCATTAGGAAACATATG  
 CTACGATAGCCATGAGGGCAGAAGTGCAGTTGACCAAGCAGGTGGTGCACAGATTGTAATTGACCATTTA  
 AGGTGCGTGTGCGGTAGGACAGATCCCGCCAGTGAGAAGCTCATGACTGTCTTTGTGGCATGCTGATGA  
 ACTATAGCAATGAGAATGATTCCTTCAGGCCAGCTTATTAGCATGGGTGTTATCCCGACCTTAGTGAA  
 GCTACTGGGCATTCACTGCCACAATGCAGCACTACCCGAGATGTGTCTCGTTGCGTTCGGGAATTTAGCA  
 GAACCTTGAGTCAAGTAAAGAACAGTTTGTAGCACAACATTGCTGAAGAGCTGGTAAAACATTTCAAGA  
 AACAAATAGAACACGATAAAAGAGAGATGATTTTTGAAGTTCTAGCGCCATTGGCAGAGAATGATGCTAT  
 TAAGCTGCAGCTGGTTGAAGCAGGTTGGTAGAGTGTCTCCTAGAGATCGTCCAACAGAAGGTGGATAGC  
 AACAAAGAGGACGACGTTGCCGAGCTTAAAACCTGCTTCTGACCTCATGGTTTTTACTGCTTGGAGATG  
 AGTCCATGCAGAACTTTTTGAAGGAGGAAAAGGCAGTGTGTCCAAAGGGTGTCTCCTGGATCCCATC  
 GAATAACCACAGCTGCAGCTGGCTGGGCATTAGCCATTGCAAAATTTGCCAGGAACGATGGAAATTTGT  
 ATTCATATGGTAGACAATGGGATTGTAGAAAACTCATGGATTTGCTGGACAGACACGTAGAAGACGGGA  
 ACGTGACGGTGCAGCACGCCCACTAAGTGCCCTCAGGAATCTAGCCATCCCAGTTGTAATAAAGCAAA  
 GATGTTATCAGCTGGTGTACCGGAGACGGTTTTGAAATTCCTTAAATCTGAAATGCCCCAGTTCAGTTT  
 AAACCTCTGGGAACGCTAAGAATGTTAATAGATGCACAAGAAGCTGCTGAGCAACTGGGAAAAGTGTCTA  
 AACTGGTAGAGCGTTTGGTTGAATGGTGTGAAGCCAAAGATCATGCCGCGTGATGGGCGAATCAAACAG  
 ACTGCTCTGCCCCTCATCCGACACAGTAAATCAAAGATGTAATTAACCATTGTACAGAGTGGTGGC  
 ATCAAGCACCTGGTTACCATGGCAACTAGTGAACATGTAATCATGCAGAAATGAAGCTCTTGTGCGCCTGG  
 CACTGATAGCAGCCTTGGAACTGGTCCCCTGAGAAGGATCTCGCAAGTGTGCTGAGCTTGTTCAGATCTT  
 ACACCGACTGCTAGCAGATGAGAGAAGTCCCCGGAGATCAAGTACAATCCATGGTCTGATCTGCGCT  
 CTCATGGGATCCGAATCTCTATACAAGGAAGTACAGGATTTGGCCTTTCTAGATGTTGTCTCCAACTTC  
 GAAGTCATGAGAACAAAAGTGTGCCAACAGGCCTCGCTTACAGAGCAGAGACTTACAGTGGAAAAGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR230661 representing NM\_001286759  
 Red=Cloning site Green=Tags(s)

MDNLSDTLKKLKI TAADRTEGSLEGCLDCLLQALAQNNAETSEKIQSGILQLFANLLTPQASCTAKVAD  
 IIAEVAKNEFMRI PCVDAGLISPLVQLLNSKDQEVLLQTGRALGNICYDSHEGRSAVDQAGGAQIVIDHL  
 RSLCGRDPA SEKLMTVFCGMLMNYSNENDSLQAQLISMGIPTLVKLLGIHCHNAALTEMCLVAFGNLA  
 ELESSKEQFASTNIAEELVKLFKKQIEHDKREMIFEVLAPLAENDAIKLQLVEAGLVECLLEIVQKQVDS  
 NKEDDVAELKTASDLMVLLLLGDESMQKLFEGGKGSVFQRVLSWIPSNHQLQLAGALAIANFARNDGNC  
 IHMVDNGIVEKLMDLDRHVEDGNVTVQHAALSALRNLAIPVVKAKMLSAGVTEIVLKFLLKSEMPVQF  
 KLLGTLRMLIDAQEAQKGNAKLVERLVEWCEAKDHAGVMGESNRLLSALIRHKSVDVIKTI VQSGG  
 IKHLVTMATSEHVIMQNEALVALALIAALELGAEKDLASAQLVQILHRLADERSAPEIKYNSMVLICA  
 LMGSESLYKEVQDLAFLDVVSKLRSHENKSVAAQASL TEQRLTVES

**TRTRP**LEQKLISEEDLAANDILDYKDDDDKV

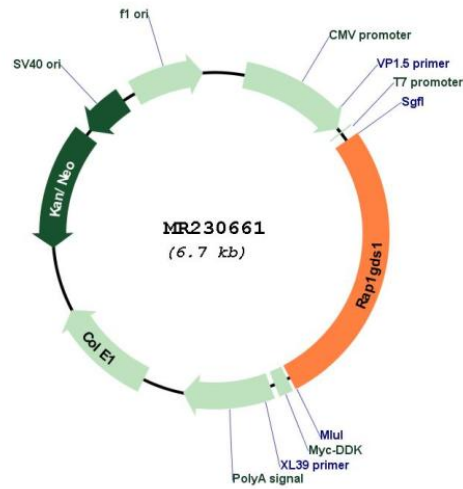
**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001286759

ORF Size: 1818 bp

<b>OTI Disclaimer:</b>	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>
<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_001286759.1</a> , <a href="#">NP_001273688.1</a>
<b>RefSeq Size:</b>	3671 bp
<b>RefSeq ORF:</b>	1821 bp
<b>Locus ID:</b>	229877
<b>UniProt ID:</b>	<a href="#">E9Q6Q4</a>
<b>Cytogenetics:</b>	3 H1
<b>MW:</b>	66.5 kDa
<b>Gene Summary:</b>	Stimulates GDP/GTP exchange reaction of a group of small GTP-binding proteins (G proteins) including Rap1a/Rap1b, RhoA, RhoB and KRas, by stimulating the dissociation of GDP from and the subsequent binding of GTP to each small G protein. Able to promote the Ca(2+) release from the endoplasmic reticulum via both inositol trisphosphate (Ins3P) and ryanodine sensitive receptors leading to a enhanced mitochondrial Ca(2+) uptake.[UniProtKB/Swiss-Prot Function]