

Product datasheet for **MR213162**

Rap1gds1 (NM_001040690) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rap1gds1 (NM_001040690) 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:

>MR213162 representing NM_001040690
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATAACCTCAGTGACACTTTAAAGAAGCTGAAGATAACAGCTGCTGACAGGACAGAGGGCAGTCTGG
 AAGGATGCTTGGATTGTCTGCTTCAAGCCTTGGCTCAGAATAATGCAGAAACAAGTGAAAAATACAAGG
 AAGTGAATTCTTCAGTTGTTTGC AAATCTGTTGACGCCACAGGCCTCCTGCACAGCCAAAGTAGCCGAC
 ATCATAGCAGAAGTAGCCAAAAATGAATTTATGCGAATCCCATGTGTAGATGCTGGATTGATTTACCAC
 TGGTACAGCTGTTAAATAGCAAAGACCAGGAAGTCTGCTTCAAACGGGCAGGGCATTAGGAAACATATG
 CTACGATAGCCATGAGGGCAGAAGTGCAGTTGACCAAGCAGGTGGTGCACAGATTGTAATTGACCATTTA
 AGGTCGCTGTGCGGTAGGACAGATCCC GCCAGTGAGAAGCTCATGACTGTCTTTTGTGGCATGCTGATGA
 ACTATAGCAATGAGAATGATTCCTTCAGGCCAGCTTATTAGCATGGGTGTTATCCCGACCTTAGTGAA
 GCTACTGGGCATTCACTGCCACAATGCAGCACTACCCGAGATGTGTCTCGTTGCGTTGCGGAATTTAGCA
 GAACCTTGAGTCAAGTAAAGAACAGTTTGTCTAGCACAACATTGCTGAAGAGCTGGTAAAACATTTCAAGA
 AACAAATAGAACACGATAAAAGAGAGATGATTTTTGAAGTTCTAGCGCCATTGGCAGAGAATGATGCTAT
 TAAGCTGCAGCTGGTTGAAGCAGGTTGGTAGAGTGTCTCCTAGAGATCGTCCAACAGAAGGTGGATAGC
 AACAAAGAGGACGACGTTGCCGAGCTTAAAACCTGCTTCTGACCTCATGGTTTTTACTGCTTGGAGATG
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 GGCATCAAGCACCTGGTTACCATGGCAACTAGTGAACATGTAATCATGCAGAATGAAGCTCTTGTGCGCC
 TGGCACTGATAGCAGCTTGGAACTGGGTCGGCTGAGAAGGATCTCGCAAGTGTCTAGCTTGTTCAGAT
 CTTACACCGACTGCTAGCAGATGAGAGAAGTGCCCGGAGATCAAGTACAATCCATGGTCTGATCTGC
 GCTCTCATGGGATCCGAATCTCTATAACAAGGAAGTACAGGATTTGCCTTCTAGATGTTGTCTCCAAC
 TTCGAAGTCATGAGAACAAAAGTGTGCCAACAGGCCTCGCTTACAGAGCAGAGACTTACAGTGGAAGG
 C

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR213162 representing NM_001040690
 Red=Cloning site Green=Tags(s)

MDNLSDTLKKLKITAADRTEGSLEGCLDCLLQALAQNNAETSEKIQSGILQLFANLLTPQASCTAKVAD
 IIAEVAKNEFMRI PCVDAGLISPLVQLLNSKDQEVLLQTGRALGNICYDSHEGRSAVDQAGGAQIVIDHL
 RSLCGRTDPASEKLM TVFCGMLMNSNENDSLQAQLISMV IPTLVKLLGIHCHNAALTEMCLVAFGNLA
 ELESSKEQFASTNIAEELVKLFKKQIEHDKREMIFEVLAPLAENDAIKLQLVEAGLVECLLEIVQKQVDS
 NKEDDVAELKTASDLMVLLLLGD ESMQKLFEGGKGSVFQRVLSWIPSNHQLQLAGALAIANFARN DGNC
 IHMVDNGIVEKLM DLDLDRHVEDGNVTVQHAAL SALRNLAI PVVVKAKMLSAGVTETVLKFLKSEMPVQF
 KLLGTLRMLIDAQAEAAEQLGKNAKLVERLVEWCEAKDHAGVMGESNRLLSALIRHSKSKDVIKTIVQSG
 GIKHLVTMATSEHVIMQNEALVALALIAAELGPAEKDLASAQLVQILHRL LADERSAPEIKYNSMVLIC
 ALMGSES LYKEVQDLAFLD VVSKLRSHENKSVAQQASL TEQRLTVES

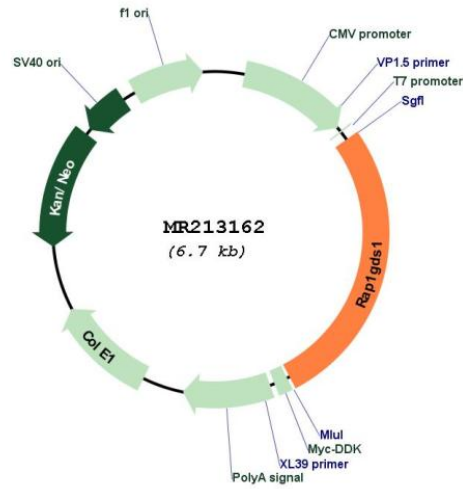
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001040690

ORF Size: 1821 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:	<ol style="list-style-type: none">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.
RefSeq:	NM_001040690.2
RefSeq Size:	3663 bp
RefSeq ORF:	1824 bp
Locus ID:	229877
UniProt ID:	E9Q6Q4
Cytogenetics:	3 H1
MW:	66.5 kDa
Gene Summary:	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]