

Product datasheet for **MR231216**

Rabep1 (NM_001291142) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rabep1 (NM_001291142) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rabep1
Synonyms:	Rab5ep; rabaptin-5; rabaptin-5alpha
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR231216 representing NM_001291142
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGCAGCGGGCCCGCTCCCAGCCTGACGTTTCTTTCAGCAACGGGTAGCAGAATTGAAAAAA
 TTAATGCAGAATTTTACGTGCACAGCAGCAGCTTGAGCAAGAATTTAATCAAAAGAGAGCAAAATTTAA
 GGAGCTCTATTTGGCTAAAGAGGAGGATCTGAAGAGGCAAAATGCAGTATTGCAAGCTGCACAGGACGAT
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 TCTCTGAGAATACTAAGCAAGAAGCTATAGATGAAGTTAAAAGGCAATGGAGAGAAGAAGTTGCTTCACT
 TCAGGCTATAATGAAAGAGACAGTCCGTGACTATGAGCATCAGTTTCACCTGAGGCTGGAGCAGGAGCGA
 GCACAGTGGGCACAGTATCGAGAATCTGCAGAGCGGAAATAGCTGACTTAAGAAGAAGTTGTCTGAAG
 GTCAAGAGGAAGAAAATTTAGAAAATGAAATGAAAAAGGTTAAGGAGCTGAATCATTATCTGGAGGCCGA
 GAAGTCTTGCAGGACTGACCTGGAGATGTACGTAGCTGTTTTGAACACTCAGAAATCTGTCTACAGGAA
 GATGCTGAGAAAATGAGGAAAGAACTGCATGAAGTTTGCCATCTCTTGAACAAGAACGACAACAACACA
 ACCAGTTAAAGCATACTGGCAGAAAGGCCAACGACCAGTTTCTGGAATCTCAGCGTTTGCTGATGAGAGA
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 CAGGAGGAGGATGAACAACAAGGGTCAATAAGAGAAAAGATAACAAGAAAACAGATACCGAAGAAGAAG
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 TTTAGACAGCACCCATGGGTGAGTCCATTCCTGGATGCAGACTTGATGTTACCCTGGAGATCCATTT
 AGTAAATCGGACAATGACATGTTTAAAGATGGACTCAGGAGAGCTCAGTCTACAGACAGCTGGGAACTT
 CAAGCTCATTGCAATCCAAAGCTTTAGGCTATAACTACAAGCGAAATCTGCTGGAAAATTTGGATGAGTC
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 AGACGTTGTGATATGTGTTCCAATTATGAAAAACAGTTACAAGGAATTCAGATTCAGGAAGCTGAAACAA
 GAGACCAGGTGAAAAACTGCAGTTAATGCTCAGGCAAGCTAATGACCAGCTTGAGAAGACGATGAAAGA
 GAAGCAGGAGCTGGAGGACTTCCTCAAGCAGAGTGGGAGGACTCAAGCCACCAGATATCTGCATTGTT
 TTAAGAGCCCAAGCCTCTGAGGTCTTACTGAAGAGTTACAACAGAGCTTTCCCAAGCAAGAGGGGACG
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 CCAGCTCCCTGAGACA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR231216 representing NM_001291142
Red=Cloning site Green=Tags(s)

MAQPGPAPQPDVSLQQRVAELEKINAFLRAQQQLEQEFNQKRAKFKELYLAKEEDLKRQNAVLQAAQDD
LGHLRTQLWEAQAEMENIKAIATVSENTKQEAIDEVKRQWREEVASLQAIMKETVRDYEHQFHLRLEQER
AQWAQYRESAEREIADLRRRLSEGQEEENLENEMKKVKELNHYLEAEKSCRTDLEMYVAVLNTQKSVLQE
DAEKLKRELHEVCHLLEQERQQHNQLKHTWQKANDQFLESQRLLMRDMQRMEIVLTSEQLRQVEELKKKD
QEEDQQRVNRKRDNKKTDTEEEVKIPVVCALTQEESSSTPLSNEEEHLDSTHGSVHSLDADLMLPSGDPF
SKSDNDMFKDGLRRAQSTDSLGTSSSLQSKALGYNYKAKSAGNLDESDFGPLVGADSVSENFDTVSLGSL
QMPSGFMLTKDQERAIKAMTPEQEETASLLSSVTQGMESAYVSPSGYRLVSETEWNLLQKEVHNAGNKLK
RRCDMCSNYEKQLQGIQIQEAETRDQVKKLQLMLRQANDQLEKTMKEKQELEDFLKQSAEDSSHQISALV
LRAQASEVLLLEELQQSFSQAKRDVQEQMAVLMQSREQVSEELVRLQKDNDLQGGKSLHVSLLAEDFIL
PDTVEVLRELVLKYRENIVHVRTAADHMEEKLKAEIFLKEQIQAEQCLKENLEETLQLEIENCKEEIAS
ISSLKAELERIKVEKGQLESTLREKSQQLESLEQEMKVNLEEQLKKETAAKATVEQLMFEEKNKAQRLQTE
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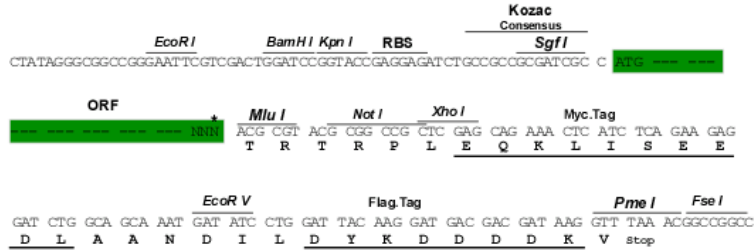
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

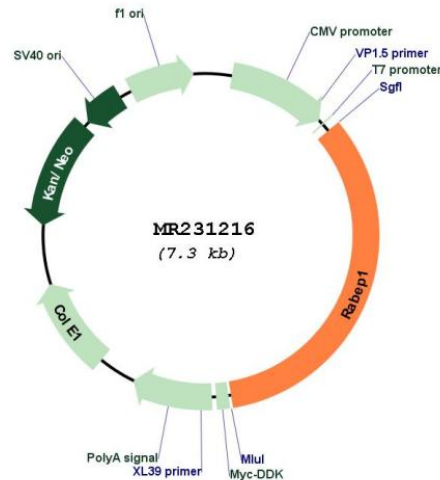
Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001291142

ORF Size: 2466 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.

RefSeq: [NM_001291142.1](#), [NP_001278071.1](#)

RefSeq Size: 5320 bp

RefSeq ORF: 2469 bp

Locus ID: 54189

UniProt ID: [O35551](#)

Cytogenetics: 11 43.21 cM

MW: 95.5 kDa

Gene Summary: Rab effector protein acting as linker between gamma-adaptin, RAB4A and RAB5A. Involved in endocytic membrane fusion and membrane trafficking of recycling endosomes. Involved in KCNH1 channels trafficking to and from the cell membrane. Stimulates RABGEF1 mediated nucleotide exchange on RAB5A. Mediates the traffic of PKD1:PKD2 complex from the endoplasmic reticulum through the Golgi to the cilium (PubMed:25405894).[UniProtKB/Swiss-Prot Function]