

Product datasheet for **RC230119**

Repulsive Guidance Molecule A (RGMA) (NM_001166283) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Repulsive Guidance Molecule A (RGMA) (NM_001166283) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Repulsive Guidance Molecule A
Synonyms:	RGM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC230119 representing NM_001166283
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGTGGCCTGGGGCCACGACGGCGGGAACCTCGAGGGAGAGGCTAGTGGTAACAGGCCGAGCTGGAT
 GGATGGGTATGGGGAGAGGGGCAGGACGTTACGCCCTGGGATTCTGGCCGACCCTCGCCTCCTTCTCTG
 CAGCTTCCCCGCAGCCACCTCCCGTGCAAGATCCTCAAGTGCAACTCTGAGTTCTGGAGCGCCACGTCG
 GGCAGCCACGCCCCAGCCTCAGACGACACCCCCGAGTTCTGTGCAGCCTTGCGCAGCTACGCCCTGTGCA
 CGCGGGCAGCGCCCGCACCTGCCGGGGTGACCTGGCCTACCACTCGGCCGTCCATGGCAGATAGAGGACCT
 CATGAGCCAGCACAAGTCTCAAGGATGGCCCCACCTCGCAGCCAGCCTGCGCAGCTCCCACCGGCC
 GGAGACAGCCAGGAGCGCTCGGACAGCCCCGAGATCTGCCATTACGAGAAGAGCTTTCACAAGCACTCGG
 CCACCCCCAACTACACGCACTGTGGCCTCTTCGGGGACCCACACCTCAGGACTTTCACCGACCGCTTCCA
 GACCTGCAAGGTGCAGGGCGCCTGGCCGCTCATCGACAATAATTACCTGAACGTGCAAGTACCAACACG
 CCTGTGCTGCCCGCTCAGCGGCCACTGCCACCAGCAAGCTCACCATCATCTTCAAGAACTTCCAGGAGT
 GTGTGGACCAGAAGGTGTACCAGGCTGAGATGGACGAGCTCCCGCCGCCTTCGTGGATGGCTCTAAGAA
 CGGTGGGGACAAGCACGGGGCCAAACAGCCTGAAGATCACTGAGAAGGTGTGAGGCCAGCAGTGGAGATC
 CAGGCCAAGTACATCGGCACCACCATCGTGGTGCAGGAGTGGCCGCTACCTGACCTTTGCCGTCGCA
 TGCCAGAGGAAGTGGTCAATGCTGTGGAGGACTGGGACAGCCAGGGTCTCTACCTCTGCCTGCGGGGCTG
 CCCCCTCAACCAGCAGATCGACTTCCAGGCCTTCCACACCAATGCTGAGGGCACCAGTGGCCGAGGCTG
 GCAGCCGACGCTGCACCCACAGCCCCGAGACCTTCCATACGAGACAGCCGTGGCCAAAGTGAAGG
 AGAAGTGCCTGGGAGGACTGTACTACAGGCTGCGTCTTCGACCTCCTCACCAGGGCGACGTGAA
 CTTACACTGGCCGCTACTACGCGTTGGAGGATGTCAAGATGCTCCACTCCAACAAGACAAACTGCAC
 CTGTATGAGAGGACTCGGGACCTGCCAGGACGGCGGCTGCGGGGCTGCCCTGGCCCCCGGCCCTCC
 TGGGCGCCCTCGTCCCGCTCTGCCCTGCTCCCTGTGTTCTGCAGCGGACCG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTAA

Protein Sequence:

>RC230119 representing NM_001166283
 Red=Cloning site Green=Tags(s)

MGGLGPRRAGTSRERLVVTGRAGWMGMGRGAGRSALGFWPTLAFLLCSFPAATSPCKILKCNSEFWSATS
 GSHAPASDDTPEFCAALRSYALCTRRTARTCRGDLAYHSAVHGIEDLMSQHNSKDGPTSQPRLRLPPA
 GDSQERSDSPEICHYEKSFHKHSATPNYTHCGLFGDPLHRTFTDRFQTKVQGAWPLIDNNYLNQVQNT
 PVLPGSAATATSKLTIIIFKNFQECVDQVYQAEMDELPAFVDGSKNGGDKHGANSKITEKVSGQHVEI
 QAKYIGTTIVVRQVGRYLTFVAVRMPEEVVNAVEDWDSQGLYLCLRGCPNLNQQIDFQAFHTNAEGTGARRL
 AAASPAPTAPETFPYETAIVAKCKEKLPEVDLYYQACVFDLLTTGDVNFLLAAYYALVDKMLHNSKDKLH
 LYERTRDLPGRAAAGLPLAPRPLLALVPLALLPVFCSGP

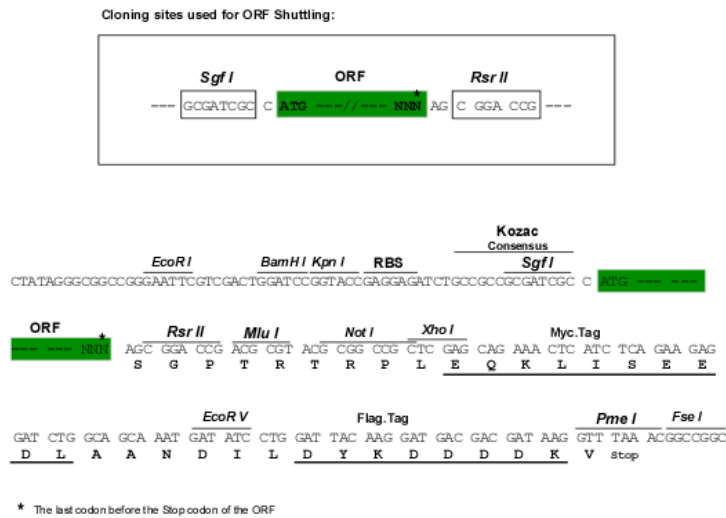
SGPTRRRLE**QKLI**SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8037_a04.zip

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:


ACCN: NM_001166283

ORF Size: 1383 bp

OTI Disclaimer: 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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

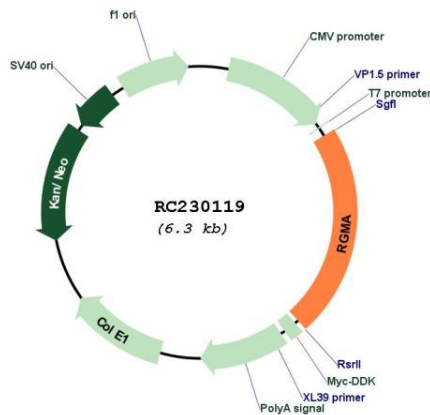
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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.

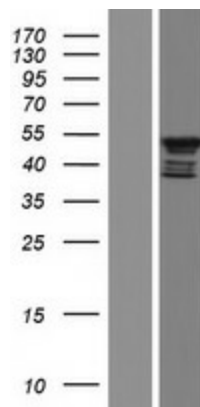
RefSeq: [NM_001166283.1, NP_001159755.1](#)
RefSeq ORF: 1377 bp
Locus ID: 56963
UniProt ID: [Q96B86](#)
Cytogenetics: 15q26.1
MW: 50.5 kDa

Gene Summary: This gene encodes a member of the repulsive guidance molecule family. The encoded protein is a glycosylphosphatidylinositol-anchored glycoprotein that functions as an axon guidance protein in the developing and adult central nervous system. This protein may also function as a tumor suppressor in some cancers. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Oct 2009]

Product images:



Circular map for RC230119



Western blot validation of overexpression lysate (Cat# [LY433119]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC230119 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).