

Product datasheet for **RC230077**

Repulsive Guidance Molecule A (RGMA) (NM_001166287) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
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)



ORF Nucleotide Sequence: >RC230077 representing NM_001166287
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGTATGGGGAGAGGGGAGGACGTTACGCCCTGGGATTCTGGCCGACCCTCGCCTTCTCTCTGCA
 GCTTCCCCGAGCCACCTCCCCGTGCAAGATCCTCAAGTGCAACTCTGAGTTCTGGAGCGCCACGTCTGGG
 CAGCCACGCCCCAGCCTCAGACGACACCCCGAGTTCTGTGACGCTTGCAGCTACGCCCTGTGCACG
 CGGGGAGCGGCCGACCTGCCGGGTGACCTGGCCTACCACTCGGCCGTCCATGGCATAGAGGACCTCA
 TGAGCCAGCACAACTGCTCAAGGATGGCCCCACCTCGCAGCCAGCCTGCGCACGCTCCACCGGCCGG
 AGACAGCCAGGAGCGCTCGGACAGCCCCGAGATCTGCCATTACGAGAAGAGCTTTCACAAGCACTCGGCC
 ACCCCCAACTACACGCACTGTGGCCTCTTCGGGGACCCACACCTCAGGACTTTCACCGACCGCTTCCAGA
 CCTGCAAGGTGCAGGGCGCTGGCCGCTCATCGACAATAATTACCTGAACGTGCAGGTACCAACACGCC
 TGTGCTGCCGGCTCAGCGGCCACTGCCACCAGCAAGCTCACCATCATCTTCAAGAACTTCCAGGAGTGT
 GTGGACGAGAAGGTGTACAGGCTGAGATGGACGAGCTCCCGGCCGCTTCGTGGATGGCTCTAAGAACG
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 GGCCAAGTACATCGGCACCACTCGTGGTGGCCAGGTGGGCCGTACCTGACCTTGGCCGTCCGATG
 CCAGAGGAAGTGGTCAATGCTGTGGAGGACTGGGACAGCCAGGGTCTCTACCTCTGCCTGCGGGGCTGCC
 CCCTCAACCAGCAGATCGACTTCCAGGCCTTCCACACCAATGCTGAGGGCACCGGTGCCCGCAGGCTGGC
 AGCCGCCAGCCTGCACCCACAGCCCCGAGACCTTCCCATACGAGACAGCCGTGGCCAAGTGAAGGAG
 AAGCTGCCGGTGGAGGACCTGTACTACAGGCTGCGTCTTCGACCTCCTACCAAGGGCGAGCTGAAC
 TCACACTGGCCGCTACTACGCTTGGAGGATGTCAAGATGCTCCACTCAACAAAGACAACTGCACCT
 GTATGAGAGGACTCGGGACCTGCCAGGCAGGGCGGCTCGGGGCTGCCCTGGCCCCCGGCCCTCCTG
 GGCGCCCTCGTCCCGCTCCTGGCCCTGCTCCCTGTGTTCTGC

AG**CGGACCG**ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC230077 representing NM_001166287
 Red=Cloning site Green=Tags(s)

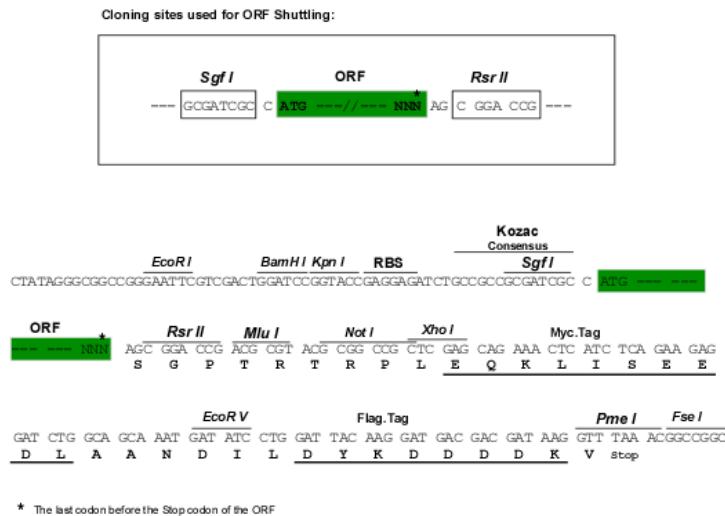
MGMGRGAGRSALGFWPTLAFLLCSFPAATSPCKILKCNSEFWSATSGSHAPASDDTPEFCAALRSYALCT
 RRTARTCRGDLAYHSAVHGIEDLMSQHNSKDGPTSQPRLRTLPPAGDSQERSDSPEICHYEKSFHKHSA
 TPNYTHCGLFGDPLRTFTDRFQTKVQGAWPLIDNNYLVQVTNTPVLPGSAATATSKLTIIIFKNFQEC
 VDQKVYQAEMDELPAAFVDGSKNGGDKHGANSKITEKVSQGHVEIQAKYIGTTIVVRQVGRYLTFVARM
 PEEVNAVEDWDSQGLYLCLRGCPNQQIDFQAFHTNAEGTGARRLAAASPAPTAPETFPYETAVAKCKE
 KLPVEDLYYQACVFDLLTTGDVNFLLAAYYALEDVKMLHSNKDKLHL YERTRDLPGRAAAGLPLAPRPLL
 GALVPLLALLPVFC

SGPTRRRLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8059_f07.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_001166287

ORF Size: 1302 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001166287.1](#), [NP_001159759.1](#)

RefSeq ORF: 1305 bp

Locus ID: 56963

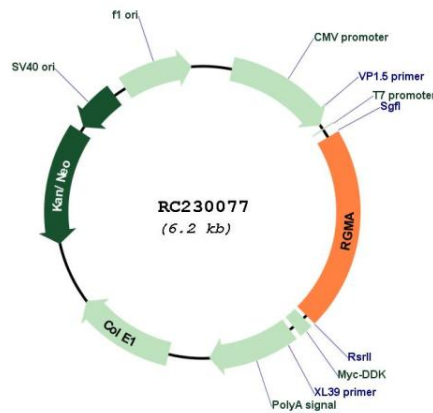
UniProt ID: [Q96B86](#)

Cytogenetics: 15q26.1

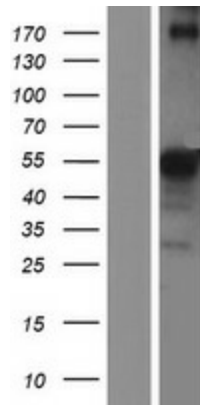
MW: 48 kDa

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 RC230077



Western blot validation of overexpression lysate (Cat# [LY433077]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC230077 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).