

Product datasheet for **RC221996**

Repulsive Guidance Molecule A (RGMA) (NM_020211) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Repulsive Guidance Molecule A (RGMA) (NM_020211) 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) |



[View online »](#)

ORF Nucleotide Sequence:

>RC221996 representing NM_020211
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCAGCCGCCAAGGGAGAGGCTAGTGGTAACAGGCCAGCTGGATGGATGGGTATGGGGAGAGGGGCAG
 GACGTTACAGCCCTGGGATTCTGGCCGACCTCGCCTTCTCTGCAGCTTCCCCGAGCCACCTCCCC
 GTGCAAGATCCTCAAGTCAACTCTGAGTTCTGGAGCGCCACGTCGGGCAGCCACGCCCCAGCCTCAGAC
 GACACCCCGAGTTCTGTGCAGCCTTGCAGCTACGCCCTGTGCACGCGCGGACGGCCCGCACCTGCC
 GGGGTGACCTGGCTACCACTCGGCCGTCCATGGCATAGAGGACCTCATGAGCCAGCACAACTGCTCAA
 GGATGGCCCCACCTCGCAGCCACGCTGCGCACGCTCCACCGGCCGGAGACAGCCAGGAGCGCTCGGAC
 AGCCCCGAGATCTGCCATTACGAGAAGAGCTTTCACAAGCACTCGGCCACCCCAACTACACGACTGTG
 GCCTTTCGGGGACCCACACCTCAGGACTTTCACCGACCGCTCCAGACCTGCAAGGTGCAGGGCGCCTG
 GCCGCTCATCGACAATAATTACCTGAACGTGCAGGTACCAACACGCCTGTGCTGCCCGGCTCAGCGGCC
 ACTGCCACCAGCAAGCTCACCATCATCTCAAGAACTTCCAGGAGTGTGTGGACCAGAAGGTGTACCAGG
 CTGAGATGGACGAGCTCCCGGCCGCTTCTGTGGATGGCTCTAAGAACGGTGGGGACAAGCACGGGGCCAA
 CAGCCTGAAGTCACTGAGAAGGTGTCAGGCCAGCACGTGGAGATCCAGGCCAAGTACATCGGCACCACC
 ATCGTGGTGCAGGAGTGGGCCGCTACCTGACCTTTGCCGTCCGATGCCAGAGGAAGTGGTCAATGCTG
 TGGAGGACTGGGACAGCCAGGCTCTACCTCTGCCTGCGGGGCTGCCCCCTCAACCAGCAGATCGACTT
 CCAGGCCTTCCACACCAATGCTGAGGGCACCGGTGCCCGCAGGCTGGCAGCCGCCAGCCCTGCACCACA
 GCCCCGAGACCTTCCATACGAGACAGCCGTGGCCAAGTGAAGGAGAAGCTGCCGTTGGAGGACCTGT
 ACTACCGCCTGCGTCTTCGACCTCTCACACGGGCGACGTGAACTTCACTGGCCGCTACTACGC
 GTTGGAGGATGTCAAGATGCTCCACTCCAACAAAGACAAACTGCACCTGTATGAGAGGACTCGGGACCTG
 CCAGGCAGGGCGCTGCGGGGCTGCCCTGGCCCCCGGCCCTCCTGGGCGCCCTGGTCCCGCTCTGG
 CCTGCTCCCTGTGTTCTGCAGCGGACCG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTAA

Protein Sequence:

>RC221996 representing NM_020211
 Red=Cloning site Green=Tags(s)

MQPPRERLVVTGRAGWMGMGRGAGRSALGFWPTLAFLLCSFPAATSPCKILKCNSEFWSATSGSHAPASD
 DTPEFCAALRSYALCTRRTARTCRGDLAYHSAVHGIEDLMSQHNSKDGPTSQPRLRTLPPAGDSQERSD
 SPEICHYEKSFHKHSATPNYTHCGLFGDPLRFTDRFQTKVQGAWPLIDNNYLNQVNTNTPVLPGSAA
 TATSKLTIIFKNFQECVDQKVYQAEMDELPAAFVDGSKNGGDKHGANSKITEKVSQHVETQAKYIGTT
 IVVRQVGRYLTFVVRMPEEVNNAVEDWDSQGLYLCLRGCPNQQIDFQAFHTNAEGTGARRLAAASPAPT
 APETFPPYETAVAKCKEKLPEVDLYYQACVFDLLTTGDVNFLLAAYYALVDKMLHSNKDKLHLYERTRDL
 PGRAAAGLPLAPRPLLALVPLALLPVFCSGP

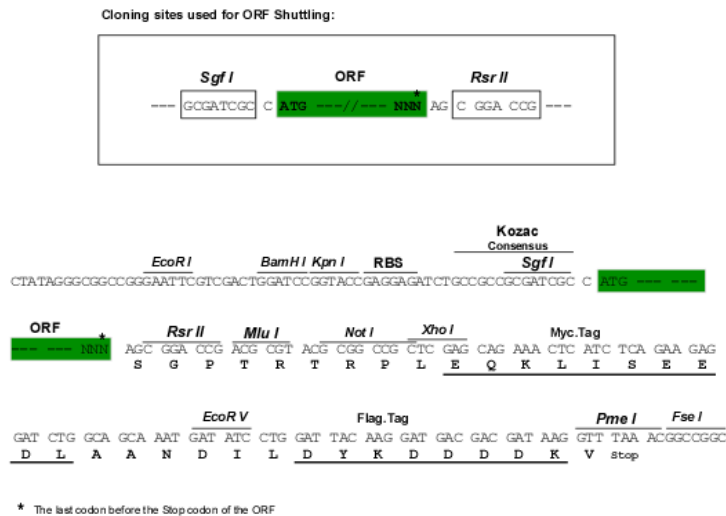
SGPTRRRLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6187_d06.zip

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:


ACCN: NM_020211

ORF Size: 1359 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_020211.3](#)

RefSeq Size: 3216 bp

RefSeq ORF: 1353 bp

Locus ID: 56963

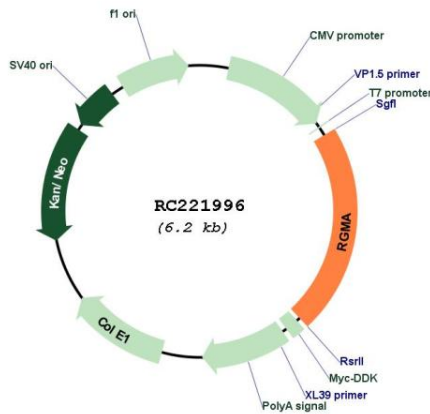
UniProt ID: [Q96B86](#)

Cytogenetics: 15q26.1

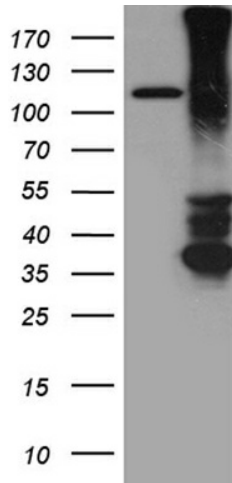
MW: 49.2 kDa

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]

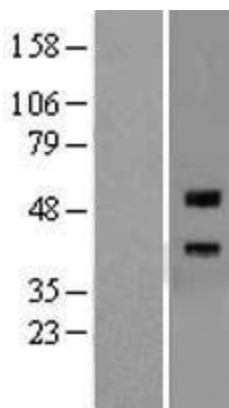
Product images:



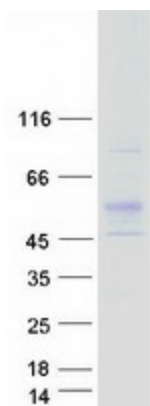
Circular map for RC221996



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RGMA (Cat# RC221996, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-RGMA (Cat# [TA811571])(1:2000). Positive lysates [LY402781] (100ug) and [LC402781] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402781]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221996 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RGMA protein (Cat# [TP321996]). The protein was produced from HEK293T cells transfected with RGMA cDNA clone (Cat# RC221996) using MegaTran 2.0 (Cat# [TT210002]).