OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

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)

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

View online »

ORF Nucleotide Sequence:

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCAGCCGCCAAGGGAGAGGCTAGTGGTAACAGGCCGAGCTGGATGGATGGGTATGGGGAGAGGGGCAG
GACGTTCAGCCCTGGGATTCTGGCCGACCCTCGCCTTCCTTCTCTGCAGCTTCCCCGCAGCCACCTCCCC
GTGCAAGATCCTCAAGTGCAACTCTGAGTTCTGGAGCGCCACGTCGGGCAGCCACGCCCCAGCCTCAGAC
GACACCCCCGAGTTCTGTGCAGCCTTGCGCAGCTACGCCCTGTGCACGCGGCGGACGGCCCGCACCTGCC
GGGGTGACCTGGCCTACCACTCGGCCGTCCATGGCATAGAGGACCTCATGAGCCAGCACAACTGCTCCAA
GGATGGCCCCACCTCGCAGCCACGCCTGCGCACGCTCCCACCGGCCGGAGACAGCCAGGAGCGCTCGGAC
AGCCCCGAGATCTGCCATTACGAGAAGAGCTTTCACAAGCACTCGGCCACCCCCAACTACACGCACTGTG
GCCTCTTCGGGGACCCACACCTCAGGACTTTCACCGACCGCTTCCAGACCTGCAAGGTGCAGGGCGCCTG
GCCGCTCATCGACAATAATTACCTGAACGTGCAGGTCACCAACACGCCTGTGCTGCCCGGCTCAGCGGCC
ACTGCCACCAGCAAGCTCACCATCATCTTCAAGAACTTCCAGGAGTGTGTGGACCAGAAGGTGTACCAGG
CTGAGATGGACGAGCTCCCGGCCGCCTTCGTGGATGGCTCTAAGAACGGTGGGGACAAGCACGGGGCCAA
CAGCCTGAAGATCACTGAGAAGGTGTCAGGCCAGCACGTGGAGATCCAGGCCAAGTACATCGGCACCACC
ATCGTGGTGCGCCAGGTGGGCCGCTACCTGACCTTTGCCGTCCGCATGCCAGAGGAAGTGGTCAATGCTG
TGGAGGACTGGGACAGCCAGGGTCTCTACCTCTGCCTGCGGGGCTGCCCCCTCAACCAGCAGATCGACTT
CCAGGCCTTCCACACCAATGCTGAGGGCACCGGTGCCCGCAGGCTGGCAGCCGCCAGCCCTGCACCCACA
GCCCCCGAGACCTTCCCATACGAGACAGCCGTGGCCAAGTGCAAGGAGAAGCTGCCGGTGGAGGACCTGT
ACTACCAGGCCTGCGTCTTCGACCTCCTCACCACGGGCGACGTGAACTTCACACTGGCCGCCTACTACGC
GTTGGAGGATGTCAAGATGCTCCACTCCAACAAAGACAAACTGCACCTGTATGAGAGGACTCGGGACCTG
CCAGGCAGGGCGGCTGCGGGGCTGCCCCTGGCCCCCCGGCCCCTCCTGGGCGCCCTGGTCCCGCTCCTGG
CCCTGCTCCCTGTGTTCTGCAGCGGACCG

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

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

MQPPRERLVVTGRAGWMGMGRGAGRSALGFWPTLAFLLCSFPAATSPCKILKCNSEFWSATSGSHAPASD
DTPEFCAALRSYALCTRRTARTCRGDLAYHSAVHGIEDLMSQHNCSKDGPTSQPRLRTLPPAGDSQERSD
SPEICHYEKSFHKHSATPNYTHCGLFGDPHLRTFTDRFQTCKVQGAWPLIDNNYLNVQVTNTPVLPGSAA
TATSKLTIIFKNFQECVDQKVYQAEMDELPAAFVDGSKNGGDKHGANSLKITEKVSGQHVEIQAKYIGTT
IVVRQVGRYLTFAVRMPEEVVNAVEDWDSQGLYLCLRGCPLNQQIDFQAFHTNAEGTGARRLAAASPAPT
APETFPYETAVAKCKEKLPVEDLYYQACVFDLLTTGDVNFTLAAYYALEDVKMLHSNKDKLHLYERTRDL
PGRAAAGLPLAPRPLLGALVPLLALLPVFCSGP

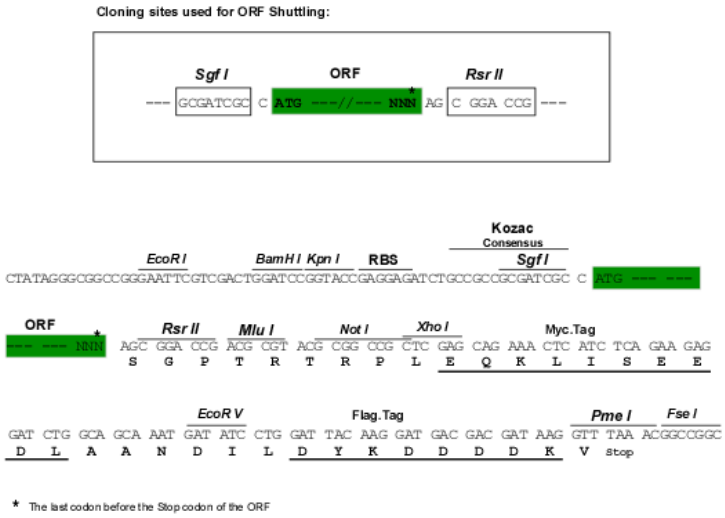
SGPTRTRRLEQKLISEEDLAANDILDYKDDDDKV

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

Restriction Sites: SgfI-RsrII

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

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.

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

RefSeq: NM_020211.3

RefSeq Size: 3216 bp

RefSeq ORF: 1353 bp

Locus ID: 56963

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

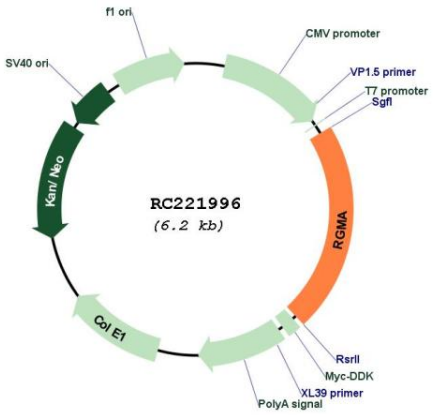
UniProt ID: Q96B86

Cytogenetics: 15q26.1

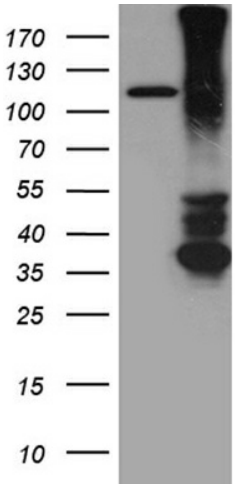
MW: 49.2 kDa

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:

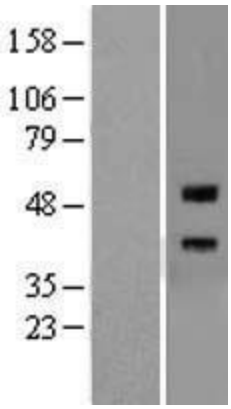


Circular map for RC221996

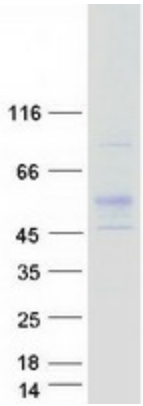


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RGMA (Cat# RC221996, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-RGMA (Cat# [TA811571])(1:2000).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

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US



Western blot validation of overexpression lysate (Cat# [LY402781]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected 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]).

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US