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Product datasheet for RC220319

GCM1 (NM_003643) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GCM1 (NM_003643) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GCM1
Synonyms:	GCMA; hGCMa
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC220319 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAACCTGACGACTTTGATTCTGAAGACAAAGAGATATTAAGCTGGGATATTAATGATGTGAAACTGC
CACAGAACGTGAAAAAAACCGACTGGTTCCAGGAGTGGCCAGATTCCTATGCCAAACACATCTACAGCTC
GGAGGACAAGAATGCGCAGCGGCACCTGAGCAGCTGGGCCATGCGCAATACCAACAACCACAACTCCCGC
ATCCTCAAGAAGTCCTGCCTGGGTGTGGTGGTGTGCGGCCGCGACTGTCTCGCAGAGGAGGGGCGCAAGA
TCTACCTGAGACCTGCCATCTGTGACAAGGCCCGGCAGAAGCAGCAGCGGAAACGCTGTCCCAACTGTGA
CGGGCCTCTGAAGCTCATCCCTTGCCGAGGTCATGGGGGCTTCCCGGTCACCAACTTCTGGAGGCACGAC
GGACGCTTTATATTTTTCCAGTCAAAGGGAGAGCATGATCATCCAAAACCAGAAACCAAGTTAGAAGCTG
AGGCAAGAAGAGCCATGAAGAAAGTGAACACAGCACCTTCCTCCGTCTCATTGAGCCTGAAGGGGAGCAC
AGAGACCAGGTCTCTTCCAGGTGAAACACAAAGTCAGGGGAGTTTACCTTTAACTTGGTCTTTCCAGGAA
GGCGTCCAATTGCCTGGTAGTTACAGTGGACATTTAATAGCTAACACTCCTCAGCAGAACTCACTAAATG
ATTGCTTTTCCTTCTCCAAGAGTTATGGTCTGGGAGGAATCACAGATCTGACTGACCAGACTTCCACTGT
GGACCCCATGAAGCTCTATGAAAAGCGCAAATTGTCCAGTAGCAGAACCTACAGTAGTGGAGACCTGCTT
CCTCCTTCTGCCTCCGGAGTCTACTCTGATCATGGCGATCTACAAGCGTGGAGTAAAAATGCTGCTTTGG
GGAGAAATCATCTTGCTGACAACTGTTATTCCAATTATCCTTTTCCTCTGACCAGCTGGCCTTGCAGCTT
CTCTCCTTCCCAAAACTCTTCAGAACCCTTTTACCAGCAGCTTCCATTGGAGCCACCTGCAGCCAAAACT
GGCTGTCCCCCATTATGGCCAAATCCAGCGGGTAATCTTTATGAAGAGAAAGTACATGTGGATTTTAACA
GCTACGTCCAGTCTCCTGCATACCATTCACCTCAAGAAGACCCCTTTCTCTTCACCTACGCCTCTCATCC
TCATCAGCAATATTCACTGCCAAGCAAGAGCAGCAAATGGGATTTTGAGGAAGAAATGACATACTTGGGT
TTGGATCACTGCAACAATGATATGCTTCTGAACCTGTGTCCTTTGAGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC220319 protein sequence
Red=Cloning site Green=Tags(s)

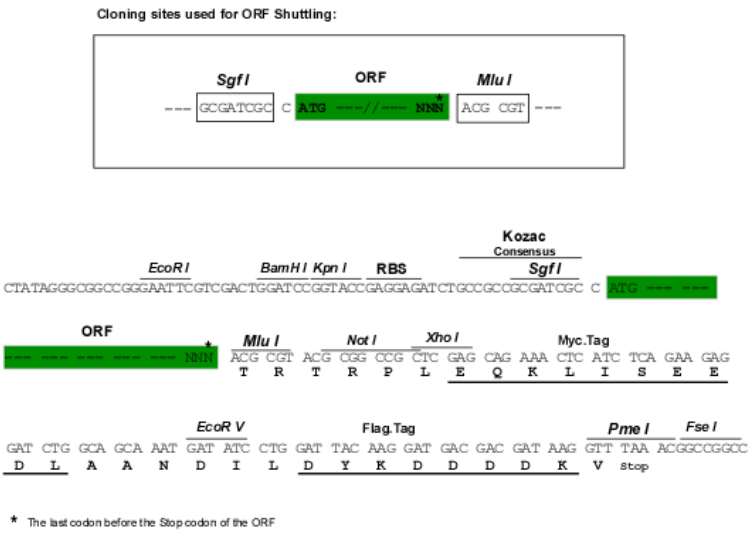
MEPDDFDSEDKEILSWDINDVKLPQNVKKTDWFQEWPDSYAKHIYSSEDKNAQRHLSSWAMRNTNNHNSR
ILKKSCLGVVVCGRDCLAEEGRKIYLRPAICDKARQKQQRKRCPNCDGPLKLIPCRGHGGFPVTNFWRHD
GRFIFFQSKGEHDHPKPETKLEAEARRAMKKVNTAPSSVSLSLKGSTETRSLPGETQSQGSLPLTWSFQE
GVQLPGSYSGHLIANTPQQNSLNDCFSFSKSYGLGGITDLTDQTSTVDPMKLYEKRKLSSSRTYSSGDLL
PPSASGVYSDHGDLQAWSKNAALGRNHLADNCYSNYPFPLTSWPCSFSPSQNSSEPFYQQLPLEPPAAKT
GCPPLWPNPAGNLYEEKVHVDFNSYVQSPAYHSPQEDPFLFTYASHPHQQYSLPSKSSKWDFEEEMTYLG
LDHCNNDMLLNLCPLR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6554_f10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003643

ORF Size: 1308 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_003643.4

RefSeq Size: 2780 bp

RefSeq ORF: 1311 bp

Locus ID: 8521

UniProt ID: Q9NP62

Cytogenetics: 6p12.1

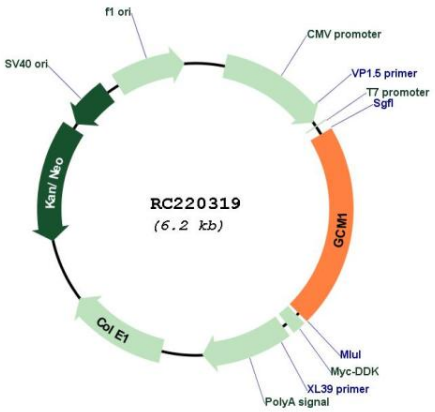
Domains: GCM

Protein Families: Transcription Factors

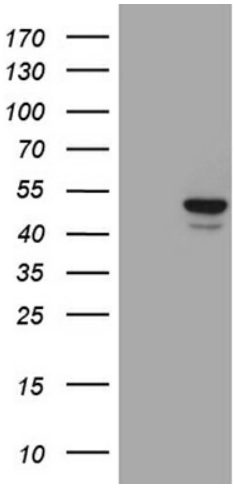
MW: 49.3 kDa

Gene Summary: This gene encodes a DNA-binding protein with a gcm-motif (glial cell missing motif). The encoded protein is a homolog of the Drosophila glial cells missing gene (gcm). This protein binds to the GCM-motif (A/G)CCCGCAT, a novel sequence among known targets of DNA-binding proteins. The N-terminal DNA-binding domain confers the unique DNA-binding activity of this protein. [provided by RefSeq, Jul 2008]

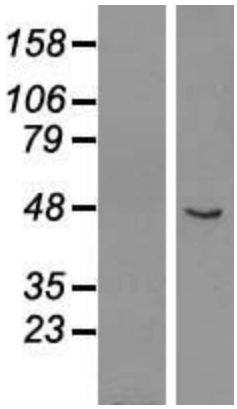
Product images:



Circular map for RC220319



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GCM1 (Cat# RC220319, 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-GCM1 (Cat# [TA810519])(1:2000). Positive lysates [LY418526] (100ug) and [LC418526] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY418526]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220319 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).