

Product datasheet for **RC206376**

GRAMD1C (NM_017577) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GRAMD1C (NM_017577) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GRAMD1C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC206376 representing NM_017577
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAGGGCGCTCCGACTGTCCGTGAGGTGATGAATGAAGGGATTCAAGCCTTGCCACCGACTTACAGG
AAGATGTAGAGGAAAATCCTAGTCCAACCTGTGGAAGAGAATAATGTGGTAGTTAAAAAACAGGGCCAAA
TTTACATAAATTGGAGTGGTACTGGAGCTTTTGGATTTCAAGTCCACCTATAAAGACAGGAATGAGGAA
TACAGAAGACAGTTCACACATCTACCTGATACAGAGAGGCTGATAGCAGATTATGCTTGTGCTCTTCAGA
GGGACATTTTGTTCAGGGACGACTATACCTTTCAGAAAAGTGGCTATGTTTCTATAGCAACATCTTCAG
ATGGGAAACTACAATTTCTATTGCTTTAAAGAATAAACCTTCATGACCAAGGAAAAAAGTCTCGACTC
ATCCCAAACGCTATCCAGATAGTTACAGAAAGTAAAAGTTTTTCTTACATCTTTGGTCCAGGGATA
GAAGTTACCTCAGTATCTTTAGGTTGTGCAGAAATGTATTATTAGATAAGAGCCTGACTAGACAGGAATT
CTGGCAACTGCTCCAGCAGAACTATGGCACTGAGCTAGGTTTAAATGCTGAGGAGATGGAAAAGTGTCA
CTGTGATTGAGGATGTGCAGCCAAGAAGTCCAGGAAGAAGCAGCTTGGATGACTCTGGGAGAGAGATG
AAAAATTATCCAAGTCAATCAGTTTTACCAGTGAATCAATTAGTCGGGTTTCAGAAAACAGAGTCATTCTGA
TGGAAATTCATCAAAAAGGAGGATTAGGCAAGAGGAGTCCAAAAATGAGAAAACAGACAAAAAGAGTCTC
TTACCAACTTTGGAAAAGAAGTTAACTAGAGTGCCATCAAAGTCACTGGACTTGAATAAAAAATGAATATC
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CGCTTTATGCAGAAATTTGCCAGTCTAGAAAATAAATAGATGTAGTATCTACCCCTTGGACTGCAGAAC
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ATAGTGATGCTTGAACAGCTGAAGAGCTCACTCATTATGCTTCAGAAAACGTTTATGCTACTAAATAAGA
ATAAGACTGGCATGGCTGTTGAAAGC

ACGCGTACGCGGCCGCTCGAGCAGAAAAGTCACTCAGAAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC206376 representing NM_017577
 Red=Cloning site Green=Tags(s)

MEGAPTVRQVMNEGDSSLATDLQEDVEENPSPTVEENNVVVKKQGPNLHNWGDWSFWISSSTYKDRNEE
 YRRQFTHLPDTERLIADYACALQRDILLQGRLYLSENWLCFYSNIFRWETTISIALKNITFMTKEKTARL
 IPNAIQIVTESEKFFFTSFGADRSYLSIFRLWQNVLLDKSLTRQEFWQLLQQNYGTGLNAAEEMENLS
 LSIEDVQPRSPGRSSLDDSGERDEKLSKISFTSEISIRVSETESFDGNSKGGGLKKEESQNEKQTKKSL
 LPTLEKKLTRVPSKSLDLNKNEYLSDLKSSTSDSVDEENVPEKDLHGRLFINRIFHISADRMFELLFTSS
 RFMQKFASSRNIIDVSTPWTAELGGDQLRTMTYTIIVLNSPLTGKCTAATEKQTLYKESREARFYLVNSE
 VLTHDVPYHDYFYTVNRYCIIRSSKQKCLRSTDLKRYKQPWGLVKSLIEKNSWSSLEDYFKQLESDLL
 IEESVLNQAIEDPGKLTGLRRRRRTFNRTAETVPKLSQHSQSDVGLGAKGDITGKKKEMENYNVTLIVV
 MSIFVLLLVLNVTLFLKLSKIEHAAQSFYRLRLQEEKSLNLASDMVSRAETIQKNKDAQHRLKGVLRDS
 IVMLEQLKSSLIMLQKTFDLLNKNKTGMARES

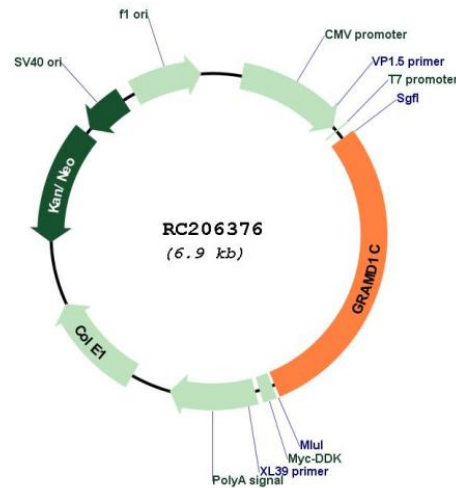
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_017577

ORF Size: 1986 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_017577.5](#)

RefSeq Size: 3770 bp

RefSeq ORF: 1989 bp

Locus ID: 54762

UniProt ID: [Q8IYS0](#)

Cytogenetics: 3q13.31

Protein Families: Transmembrane

MW: 76 kDa

Gene Summary: Cholesterol transporter that mediates non-vesicular transport of cholesterol from the plasma membrane (PM) to the endoplasmic reticulum (ER) (By similarity). Contains unique domains for binding cholesterol and the PM, thereby serving as a molecular bridge for the transfer of cholesterol from the PM to the ER (By similarity). Plays a crucial role in cholesterol homeostasis and has the unique ability to localize to the PM based on the level of membrane cholesterol (By similarity). In lipid-poor conditions localizes to the ER membrane and in response to excess cholesterol in the PM is recruited to the endoplasmic reticulum-plasma membrane contact sites (EPCS) which is mediated by the GRAM domain (By similarity). At the EPCS, the sterol-binding VASt/ASTER domain binds to the cholesterol in the PM and facilitates its transfer from the PM to ER (By similarity).[UniProtKB/Swiss-Prot Function]