

Product datasheet for **RC239338**

GRAMD1B (NM_001286564) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GRAMD1B (NM_001286564) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GRAMD1B
Synonyms:	LINC01059
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC239338 representing NM_001286564
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGTGGAGAAGGGCTCAGATCACTCCTCGGACAAGTCCCGTCCACACCGGAGCAGGGCGTGCAGCGCA
 GCTGCTCCTCCAGTCCGGCCGGAGCGGCGCAAGAATTCGAAGAAAAGCCAGAGTTGGTATAATGTGTT
 AAGCCCCACCTACAAGCAGAGAAATGAAGACTTCAGAAAGCTCTTAAAGCAGCTTCCAGACACGGAGCGC
 CTCATTGTTGATTACTCATGTGCACTCCAAAGAGACATTCTCTTCAGGGCCGACTCTACCTCTCTGAAA
 ATTGGATCTGCTTCTACAGCAACATCTTCGCTGGGAACTCTGCTGACAGTCCGTTTGAAGACATCTG
 TTCCATGACTAAAGAAAAACAGCTCGCCTCATTCCCAATGCCATCCAAGTTTGCAGTATTGAGAAAAG
 CACTTCTTCACTTCGTTTGGGGCCGGGATAGGACATATATGATGATGTTCCGGCTCTGGCAGAATGCTC
 TCCTTGAAAAGCCTCTGTGTCCAAGGAGCTCTGGCACTTTGTTACCAAGTGTATGGGAACGAATTGGG
 CCTGACCACTGATGACGAGGACTACGTGCCCCCTGACGACGACTTCAACACAATGGGATACTGTGAAGAG
 ATCCCTGTGGAAGAGAATGAAGTGAATGACAGCTCATCCAAGAGCAGCATAGAGACCAAGCCAGATGCCA
 GTCCACAGCTGCCAAGAATCCATCACCAACAGCACACTAACATCCACAGGGAGCAGTGAAGCCCCCGT
 CTCGTTTGATGGGCTGCCCTGGAGGAAGAGCGCTGGAGGGAGACGGGTCCCTGGAAAAGGAGCTCGCC
 ATTGACAACATCATGGGGGAGAAGATTGAGATGATCGCTCCTGTGAACCTCCCTTCACTGGACTTCAATG
 ACAATGAGGACATCCCCACTGAGCTCAGTGACTTTCGACACACACGATGAAGGAGAGGTCCAGGCCTT
 CTATGAGGACCTGAGTGGCCGGCAGTACGTGAATGAAGTCTTCACTTCAGCGTGGACAAGCTCTATGAC
 CTCCTCTTCACTCACTCGCCCTTCCAGCGGGATTTATGGAGCAGCGCGCTTCTCTGATATCATCTTCC
 ATCCATGGAAAAAGGAGGAGAATGGAAACAGAGCCGAGTGATTCTTTACACCATCACCTTACCAACCC
 TCTGGCTCCCAAACTGCCACTGTGAGGAGACACAGACCATGTACAAGGCGAGCCAGGAGAGTGAATGT
 TACGTGATAGATGCCGAAGTCTCACCCACGACGTGCCCTACCATGACTACTTCTACACAATCAATCGCT
 ACACGCTCACCCGTGTGGCTCGGAACAAGAGCCGACTCAGGGTCTCCACAGAGCTGCGCTATCGAAAACA
 GCCCTGGGGTTAGTGAAAACGTTTCATCGAGAAGAACTTCTGGAGTGGGCTGGAGGACTACTTCCGCCAT
 TTAGAGAGCGAGCTGGCCAAAACGGAGAGCACTTATTTGGCTGAGATGCACAGACAATCTCCCAAAGAGA
 AGGCCAGCAAGACTACAACGGTGCGGAGGAGGAAGCGTCCCATGCCACCTGCGAGTCCCTCACCTGGA
 AGAGGTGATGAGCCCGGTACACACGCCACAGATGAGGATGTGGGCCACAGGATCAAACATGTGGCAGGT
 TCCACACAGACGCGGCATATCCCGGAGGACACCCCAACGGTTTCCACCTGCAGAGCGTGTCCAAGCTGC
 TGCTGGTTATCAGCTGTGTGATCTGTTTCAGTCTGGTGTGCTGGTGCATCCTTAACATGATGCTCTTCTA
 CAAACTCTGGATGTTGGAATACACCACGACACCTCACTGCCTGGCAGGGTCTAAGGCTCCAAGAAAGG
 TTACCCAGTCTCAGACAGAATGGGCCAGCTCTTAGAGTCCCAACAAAAGTACCACGATACTGAGCTCC
 AAAAATGGAGGAAATCATCAAATCCTCAGTGATGCTCCTTGACCAGATGAAGGACTCGCTCATCAACCT
 TCAGAACGGCATCAGGTCCCGGACTACACGTGCGAAAGTGAAGAAAAGAGGAATCGCTATCAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239338 representing NM_001286564
 Red=Cloning site Green=Tags(s)

MVEKGS D H S S D K S P S T P E Q G V Q R S C S S Q S G R S G G K N S K K S Q S W Y N V L S P T Y K Q R N E D F R K L F K Q L P D T E R
 L I V D Y S C A L Q R D I L L Q G R L Y L S E N W I C F Y S N I F R W E T L L T V R L K D I C S M T K E K T A R L I P N A I Q V C T D S E K
 H F F T S F G A R D R T Y M M F R L W Q N A L L E K P L C P K E L W H F V H Q C Y G N E L G L T S D D E D Y V P P D D F N T M G Y C E E
 I P V E E N V N D S S K S S I E T K P D A S P Q L P K K S I T N S T L T S T G S S E A P V S F D G L P L E E E A L E G D G S L E K E L A
 I D N I M G E K I E M I A P V N S P S L D F N D N E I P T E L S D S S D T H D E G E V Q A F Y E D L S G R Q Y V N E V N F S V D K L Y D
 L L F T N S P F Q R D F M E Q R R F S D I I F H P W K K E E N G N Q S R V I L Y T I T L N P L A P K T A T V R E T Q T M Y K A S Q E S E C
 Y V I D A E V L T H D V P Y H D Y F Y T I N R Y T L T R V A R N K S R L R V S T E L R Y R K Q P W G L V K T F I E K N F W S G L E D Y F R H
 L E S E L A K E T S T Y L A E M H R Q S P K E K A S K T T T V R R R K R P H A H L R V P H L E E V M S P V T T P T D E D V G H R I K H V A G
 S T Q T R H I P E D T P N G F H L Q S V S K L L L V I S C V I C F S L V L L V I L N M M L F Y K L W M L E Y T T Q T L T A W Q G L R L Q E R
 L P Q S Q T E W A Q L L E S Q Q Y H D T E L Q K W R E I K S S V M L L D Q M K D S L I N L Q N G I R S R D Y T S E S E E K R N R Y H

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001286564

ORF Size: 2094 bp

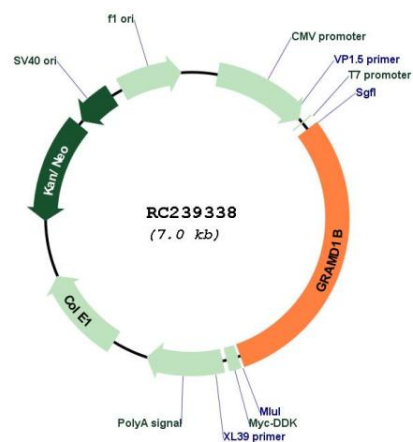
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<u>NM_001286564.2</u>
RefSeq Size:	7636 bp
RefSeq ORF:	2097 bp
Locus ID:	57476
UniProt ID:	<u>Q3KR37</u>
Cytogenetics:	11q24.1
Protein Families:	Transmembrane
MW:	81.5 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 in the adrenal gland 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]

Product images:



Circular map for RC239338