

Product datasheet for **RG219269**

GRAMD1B (NM_020716) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GRAMD1B (NM_020716) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GRAMD1B
Synonyms:	LINC01059
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RG219269 representing NM_020716
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAAAGGATTCAAGCTCTCCTGCACTGCCAGTAACTCCAACCGCAGCACGCCGGCTGCTCGCCATCC
 TCCGGAAGCGGTCTCGCTCGCCAACCCCGAGAACCAGGACGGAGACACCATGGTGGAGAAGGGCTCAGA
 TCACTCCTCGGACAAGTCCCCGTCCACACCGGAGCAGGGCGTGCAGCGCAGCTGCTCCTCCAGTCCGGC
 CGGAGCGCGGCAAGAATTCCAAGAAAAGCCAGAGTTGGTATAATGTGTTAAGCCCCACCTACAAGCAGA
 GAAATGAAGACTTCAGAAAGCTCTTTAAGCAGCTTCCAGACACGGAGCGCCTCATTGTTGATTACTCATG
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 AAATCCTCAGTGATGCTCCTTGACCAGATGAAGGACTCGCTCATCAACCTTCAGAACGGCATCAGGTCCC
 GCGACTACAGTCGGAAGTGAAGAAAAGGAATCGCTATCAT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG219269 representing NM_020716
 Red=Cloning site Green=Tags(s)

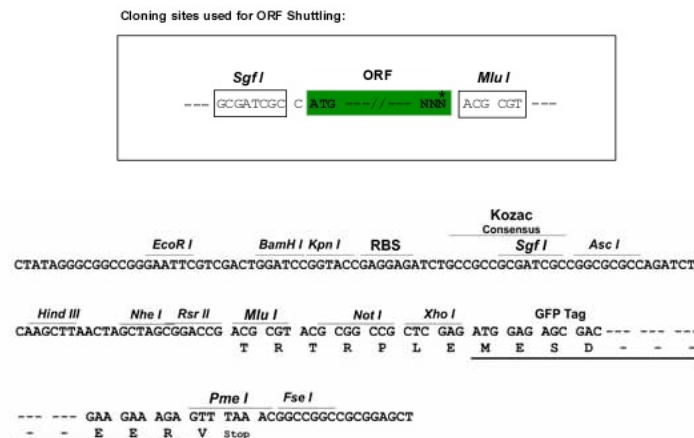
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 NGNQSRVILYITLTNPLAPKTATVRETQTMKASQESECYVIDAEVLTHDVPYHDYFYTINRYTLTRVA
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 VRRRKRP AHLRVPHLEEVMSPTTPTDEDVGHRIKHVAGSTQTRHIPEDTPNGFHLQSVSKLLLVISCV
 ICFSLVLLVILNMMLFYKLWMLEYTTQTLTAWQGLRLQERLPQSQT EWAQLLESQQKYHDT ELQKWREII
 KSSVMLLDQMKDSLINLQNGIRSDYTSESEEKRNRYH

TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1691_b05.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_020716

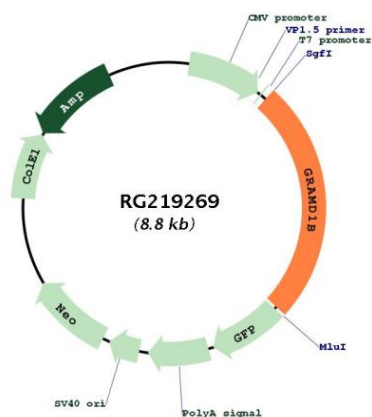
ORF Size: 2214 bp

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_020716.1</u> , <u>NP_065767.1</u>
RefSeq Size:	7906 bp
RefSeq ORF:	2217 bp
Locus ID:	57476
UniProt ID:	<u>Q3KR37</u>
Cytogenetics:	11q24.1
Protein Families:	Transmembrane
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 RG219269