

Product datasheet for SC328753

GRAMD1C (NM 001172105) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: GRAMD1C (NM_001172105) Human Untagged Clone

Tag: Tag Free Symbol: GRAMD1C **Mammalian Cell** Neomycin

Selection:

Vector: pCMV6-Entry (PS100001) E. coli Selection: Kanamycin (25 ug/mL)

>SC328753 representing NM_001172105. **Fully Sequenced ORF:**

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGAAAACTTGTCACTGTCGATTGAGGATGTGCAGCCAAGAAGTCCAGGAAGAAGCAGCTTGGATGAC TCTGGGGAGAGAGATGAAAAATTATCCAAGTCAATCAGTTTTACCAGTGAATCAATTAGTCGGGTTTCA GAAACAGAGTCATTCGATGGAAATTCATCAAAAGGAGGATTAGGCAAAGAGGAGTCCCAAAATGAGAAA CAGACCAAAAAGAGTCTCTTACCAACTTTGGAAAAGAAGTTAACTAGAGTGCCATCAAAGTCACTGGAC TTGAATAAAAATGAATATCTTTCTCTGGACAAAAGCAGCACTTCAGATTCTGTTGATGAAGAAAATGTT CCTGAGAAAGATCTTCATGGAAGACTTTTTATCAACCGTATTTTTCATATCAGTGCTGACAGAATGTTT GAATTGCTCTTTACCAGTTCACGCTTTATGCAGAAATTTGCCAGTTCTAGAAATATAATAGATGTAGTA TCTACCCCTTGGACTGCAGAACTTGGAGGTGATCAGCTGAGAACGATGACCTACACTATAGTCCTTAAT CGATTTTATTTGGTAGATTCAGAAGTACTGACACATGATGTCCCCTACCATGATTACTTCTATACCGTG AACAGATACTGTATCATCCGATCTTCAAAACAGAAATGCAGGCTAAGAGTTTCCACAGATTTGAAATAC AGAAAACAGCCATGGGGCCTTGTCAAATCTTTAATTGAAAAGAATTCCTGGAGTTCTTTGGAGGACTAT TTCAAACAGCTTGAATCAGATTTGTTAATTGAAGAATCTGTATTAAATCAGGCCATTGAAGACCCTGGA AAACTTACTGGCCTACGAAGGAGAAGGCGAACCTTCAACCGAACAGCAGAAACAGTTCCTAAACTTTCC ACACTGTTTCTGAAGCTGTCAAAGATAGAACATGCTGCTCAGTCCTTTTACCGTCTCCGCCTCCAAGAA GAGAAATCTTTAAATTTAGCCTCTGATATGGTGTCAAGAGCAGAAACTATTCAGAAGAATAAAGATCAG ATGCTTCAGAAAACGTTTGATCTACTAAATAAGAATAAGACTGGCATGGCTGTTGAAAGC<mark>TAG</mark> **ACGCGTACGCGCCCCTC**GAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul



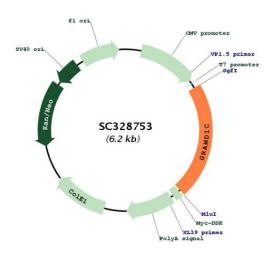
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Plasmid Map:



ACCN: NM 001172105

Insert Size: 1374 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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.

RefSeg: NM 001172105.1

 RefSeq Size:
 3497 bp

 RefSeq ORF:
 1374 bp

 Locus ID:
 54762

 UniProt ID:
 Q8IYS0

 Cytogenetics:
 3q13.31



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Protein Families: Transmembrane

MW: 52 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]

Transcript Variant: This variant (2) represents use of an alternate promoter and 5' UTR and uses a downstream start codon, compared to variant 1. The resulting isoform (2) has a

substantially shorter N-terminus, compared to isoform 1.