

Product datasheet for **SC326198**

GRAMD1A (NM_001136199) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Tag Free
Symbol:	GRAMD1A
Synonyms:	KIAA1533
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



Fully Sequenced ORF:

>SC326198 representing NM_001136199.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAAATTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTTTCGACACACACCCCACTCTGGCCGAGCAGCCAAAGCAGCTCCCATCGCTCCGAAACGGCTG
CAGCTCCTGCCCAAGCCGCCCCACCTGAGCCAGAACAGGCACCATGGTGGAGAAGGGATCAGAT
AGCTCCTCAGAGAAGGGTGGGGTGCCTGGGACCCCAAGCAGCCTAGGCAGCCGAACTTCATC
CGCAACAGCAAGATGCTGAGCCCCACTTATAAGCAGCGTAATGAGGACTTCCGAAACTGTTTCAGAAA
CTCCCCGAAGCAGAACGCCCTCATTGTGGATTACTCTGCGCCCTGCAGCGTGAGATCCTGCTCCAGGGC
CGCCTCTACCTCTCTGAGAAGTGGATCTGCTTCTACAGCAACATCTTCCGCTGGGAGACCAGATCTCC
ATCCAGCTGAAGGAAGTGACATGTCTGAAGAAAGAAAGACGGCCAAGCTGATCCCCAACGCCATCCAG
ATCTGCACGGAGAGCGAGAAGCATTCTTCACTTCTTTGGGGCCCGTGACCGCTGCTTCTCTCATC
TTCCGCTCTGGCAGAATGCACTGCTTGAAGACGCTGAGTCCCGCGAGCTTGGCACCTGGTGCAT
CAGTGTACGGCTCAGAGCTGGGCTCACCAGTGAGGATGAGGACTATGTCTCCCCCTTGACAGTGAAC
GGTCTGGGGACCCCAAGGAAGTGGGAGATGTGATCGCCCTGAGCGACATCACCTCCTCGGGGGCAGCT
GACCGCAGCCAGGAGCCAAGCCAGTGGGTTTCGCGCCGTGGCCATGTACGCCCCAACCTTTCCGAGCC
AGCAGCGACGACAGACATGGGGCAGAGGAGACAAGGAGGAGCAGGTAGACAGCCAGCCAGACGCCCTCC
TCCAGCCAGACAGTGACCCCGGTGGCTGAACCCCGAGCACAGAGCCACCCAGCCTGACGGGCCACCC
ACCCTGGGGCCCTTGGATCTGCTGCCAGTGAGGAGCTATTGACAGACACAAGTAAGTCTCTTCACTCC
ACTGGGGAGGAAGCGGACTTGGCTGCCCTGCTTCCGACCTCTCCGGCCGCTCCTCATCAACTCTGTG
TTCCATGTGGGGCTGAGCGGCTCCAGCAGATGCTCTTCTCGGACTCGCCCTTCTCCAGGGCTTCTTA
CAGCAGTGAAGTTCACAGACGTGACGCTGAGCCCTGGAGTGGGGACAGCAAGTCCACACGCGCCGG
GTGCTGACGTACACCATCCCCATCAGCAACCCACTGGGCCCAAGAGCGCTCCGTGGTGGAGACACAG
ACGCTGTTCCGGCGCGGCCCCAGGCCGGGGTGTGTGGTGGACTCCGAGGTGCTGACGCAGGGCATC
CCCTACCAGGACTACTTCTACACTGCCACCGCTACTGCATCCTGGGTCTGGCCCGGAACAAGGCGCGG
CTCCGAGTGTCTTCTGAGATCCGCTACCGAAAGCAGCCGTGGAGCCTGGTGAAGTCGCTCATTGAGAAG
AACTCGTGGAGCGGCATTGAAGACTATTTCCACCATCTGGAGCGAGAGCTCGCCAAGGCTGAGAAGCTG
TCTCTGGAGGAAGCGGGAAGGATGCCCGGGCTTGCTATCCGGCCTGCGGCGGCGGAAGCGGCCCTG
AGCTGGCGGGCTCACGGGGACGGGCCCCAGCACCCAGATCCTGACCCCTGTGCCGGGCGGCATTAC
ACCTCGGGCTCCCTCAGCTCCCGCTTCTCCGAACCATCTGTGGACCAGGGCCCCGGGCGAGCATCCCC
AGTGCCCTGGTCTCATCAGCATTGCTTATCATCCTCATCGCCCTCAACGTCCTGCTTCTTACCGC
CTCTGGTCCCTGGAAGGACAGCCACACCTTTGAGTCTGGCACAGCCTGGCCCTGGCCAAGGGCAAG
TTCCCCCAGACGGCCACAGAGTGGGCGGAGATCCTGGCGCTGCAGAAGCAATTCACAGCGTGGAGGTG
CACAAGTGGAGGAGATCCTGCGGGCTCCGTGGAGCTCCTGGATGAGATGAAGTTCGCTGGAGAAG
CTGACCAAGGCATCACAGTCTCAGACCTCCCTTTGACACCCAGCCCCGGCCGATGACAGCTTTTC
TGA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites:

SgfI-MluI

ACCN:

NM_001136199

Insert Size:

2142 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001136199.2</u>
RefSeq Size:	2649 bp
RefSeq ORF:	2142 bp
Locus ID:	57655
UniProt ID:	<u>Q96CP6</u>
Cytogenetics:	19q13.11
Protein Families:	Transmembrane
MW:	79.4 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). May play a role in tumor progression (By similarity). [UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (2) lacks two alternate in-frame exons, compared to variant 1. The encoded isoform (2) has the same N- and C-termini, but is 11 amino acids shorter than isoform 1.