

## Product datasheet for **MC200835**

### Gramd1a (BC018554) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Gramd1a (BC018554) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Gramd1a
Synonyms:	1300003M23Rik; AI415002; AW547240; D7Bwg0611e
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >BC018554  
 CTCTGGCTTCTGAGTCAGAACCCAGGCACCATGGTGGAGAAGGGGTCTGACAGCTCCTCTGAGAAAAGTGG  
 CGTGTCCGGGACACTCAGCACCCAGAGCCTGGGCAGCCGGAATTCATCCGCAACAGTAAGAAGATGCAG  
 AGCTGGTACAGTATGCTGTGTCCACATACAAACAACGCAACGAGGACTCCGGAACTGTTTCAGCAAAC  
 TTCCTGAAGCAGAGCGCCTCATCGTGGATTACTCCTGCGCCCTGCAGAGGGAGATCCTCCTCCAGGGCCG  
 CCTCTACCTCTCTGAGAACTGGATCTGTTTCTACAGCAACATCTCCGCTGGGAGACCACAATTTCCATC  
 CAGTTGAAGGAAGTACCTGTCTGAAGAAGGAGAAGACGGCTAAGCTCATCCCCAATGCCATTGAGATCT  
 GTACTGAGAGTGAGAAGCATTCTTCACTTCTCGGGGCCGAGACCGCTGCTTCTCCTCATCTTCCG  
 TCTCTGGCAGAATGCGCTGCTTGAAAAGACACTGAGTCCTCGAGAGCTTTGGCACCTGGTCCATCAGTGC  
 TATGGCTCGGAGCTGGGCCTCACAGTGAAGACGAAGACTATGTCTGCCCTTGCAACTGAATGGTCTTG  
 GGAGTCCCAAAGAGGTGGGAGACATGATCGCACTCAGCGACATCAGTCCCTCGGGGGCGGCTGACCACAG  
 CCAGGAGCCAAGCCCTGTGGTTCAAGGCGTGGCCGGTCAACCCAAACCTCTCTCGAGCCAGCAGTGT  
 GCAGACCATGGGGCCGAGGAGGACAAGGAAGAACAGACGGACAGTCAAGTGGATGCCTCCTCCAGCCAGA  
 CAGTGACCCAGTACGAGAACCCTGAGTTCTGAGCCGACACCAGATGGGCCACTTCTCCTTGGG  
 TCCCTTGATCTGCTGTCTAGAGAGGAACATTGACAGACACGAGTAACTCGTCTCATCCACTGGGGAG  
 GAAGGTGACCTGGCTGCACTGCTGCCTGACCTCTCCGGCCGGCTCCTCATCAACTCCGTCTTCCACATGG  
 GTGCTGAGCGTCTGCAGCAGATGCTTCTCGGACTCTCCGTTCTGCAAGGCTTCTGACGACAGCGCAA  
 GTTCACAGATGTGACCTTGGAGCCTTGGAGCAGTACAGCAAGTCCACCAGCGCAGAGTCTGACCTAC  
 ACCATCCCCATTAGCAACCAGCTAGGCCCAAGAGCGCCTCTGTGGTGGAGACACAGACGCTGTTCCGGC  
 GCGGCCACAGGGCGGGGCGGTGCGTGGTGGACTCTGAGGTGCTCACCCAGGGCATCCCGTACCAGGACTA  
 CTTCTACACTGCCACCAGTACTGTATCCTGGGTCTGGCCCGAACAAGGCCGGCTTCGTGTATCCTCA  
 GAGATCCGCTACCGAAAGCAACCGTGGAGCCTCGTAAAGTCGCTCATTGAGAAGAACTCGTGGAGCGGCA  
 TCGAAGATTATTTCCACCACCTGGATCGAGAACTCGCAAGGCAGAAAAGCTGTCCTGGAGGAAGGAGG  
 GAAAGATACACGTGGACTACTGTACGGCCTGCGGAGGAGGAAGCGCCCTGAGCTGGAGGGGACACAGA  
 GATGGGCCTCAGACCCAGACCCAGACCCTGCACCCAGACCAGCATGCACACCTCAGGTTCCCTCAGCT  
 CTCGTTCTCGGAACCATCTGTGGATCAGGGCCCTGGGGCAGGCATCCCCAGCGCCTGTTTCTCATCAG  
 CATTGTCTCATCGTTCTCATCGCCCTCAATGCCCTCCTTCTACCGTCTCTGGTCTCTGGAGAGAACA  
 GCCCATACCTTTGAGTCTGGCACAGCCTGGCACTGGCCAAGGGCAAGTCCCCAGACAGCCACGGAGT  
 GGGCGGAGATCTGGCTCTGCAGAAGCACTTCCACAGCCTTGGAGTGCACAAGTGGAGGCAGATCCTTCG  
 AGCATCCGTGGAGCTCCTGGATGAGATGAAGTTCTCCTTGGAGAAGCTACATCAAGGAATTACTGTCCCG  
 GATCCTCCCTGGACACTCAGCCACAGCCTGATGACAGTTTTCCCTGAGGACTCCTGATTGAAAAGCCAC  
 ACCCCTAAACGGACAGAAGGACACATGGAACCCTGGCAGTCACTGCTGGCACAGTGCGAATGCCCGCGGG  
 AGGTTCTGCCTGCCCTCACTGTGGCCCTGCCAAGAGCCACACAGACCTGGGGACCATAGAACCAGAT  
 GCACTTTAGATCTGTGTGAGCGATTCCAGCTGCCACTGCCTGCTCAGCCAGGGAGCTGGCCTGGTCTTTG  
 GCAGACTCCCCCTCAACTAACTATTTTGGCCAGCTGGAGTTGTGGGGGCACCTTTTGGGGTGACAAA  
 GAACCTCTGGGTTTAAATGATTTATTTGGGAATAACGACCCCAATAAAGGGTTGGAAATGGCAAAAAA  
 AA

**Restriction Sites:** RsrII-NotI

**ACCN:** BC018554

**Insert Size:** 1944 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).

**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:** [BC018554](#), [AAH18554](#)

**RefSeq Size:** 2513 bp

**RefSeq ORF:** 1944 bp

**Locus ID:** 52857

**Cytogenetics:** 7 19.3 cM

**Gene Summary:** Cholesterol transporter that mediates non-vesicular transport of cholesterol from the plasma membrane (PM) to the endoplasmic reticulum (ER) (PubMed:30220461). 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 (PubMed:30220461). Plays a crucial role in cholesterol homeostasis and has the unique ability to localize to the PM based on the level of membrane cholesterol (PubMed:30220461). 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 (PubMed:30220461). 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 (PubMed:30220461). May play a role in tumor progression (PubMed:27585821).[UniProtKB/Swiss-Prot Function]