

## Product datasheet for **MC220347**

### **Abcg8 (NM\_026180) Mouse Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Abcg8 (NM_026180) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Abcg8
Synonyms:	1300003C16Rik; AI114946; sterolin-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >MC220347 representing NM\_026180  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTGAGAAAACCAAGAAGAGACCCAGCTGTGGAATGGGACTGTACTTCAGGATGCTTCGCAGGGCC  
 TCCAGGACAGCTTGTTCCTCGGAAAGTGACAACAGTCTGTACTTCACCTACAGTGGTCAGTCCAACAC  
 TCTGGAGGTCAGAGATCTCACCTACCAGGTGGACATCGCCTCTCAGGTGCCTTGTTTGAGCAGCTGGCT  
 CAGTTCAAGATACCCTGGAGGTCTCATAGCAGCCAAGACTCCTGTGAGCTGGGCATCCGAAATCTAAGCT  
 TCAAAGTGAGGAGTGGACAGATGCTGGCCATCATAGGGAGCTCAGGCTGCGGGAGAGCCTCACTACTCGA  
 CGTGATCACAGGCAGAGGCCACGGTGGCAAGATGAAATCAGGACAAATTTGGATAAATGGCAACCCAGT  
 ACGCCTCAGCTGGTGAGGAAGTGCCTTGCAGATGTGCGGCAGCATGACCAACTGCTGCCAACCTGACCG  
 TCAGAGAGACCCTGGCTTTCATTGCCAGATGCGCCTGCCAGGACCTTCTCCAGGCCAGCGTGACAA  
 ACGGGTGAAGACGTAATCGCCGAGCTGCGGCTGCGGCAGTGCGCCAACACCAGAGTGGCAACACGAT  
 GTACGTGGGGTGTCCGGGGTGAGCGCCGACGAGTGGATTGGGGTGCAGCTCCTGTGGAACCCAGGAA  
 TCCTCATTCTGGATGAACCCACTTCTGGCCTCGACAGCTTCACAGCCACAATCTGGTGACAACCTTGTC  
 CCGCCTGGCCAAGGGCAACAGGCTGGTGCTCATCTCCCTCCACCAGCCTCGCTCTGACATCTTCAGGCTA  
 TTTGACCTGGCTCTTCTGATGACATCTGGCACCCCTATCTACCTGGGGCGGGCAGCAAATGGTGAGT  
 ACTTCACATCCATTGGCCACCCTTGTCTCGCTATAGCAACCTGCGGACTTCTACGTGGACTTGACCAG  
 CATCGACAGACGAGCAAAGAACGGGAGGTGGCCACCCTGGAGAAGGCACAGTCTCTTGACGCCCTGTT  
 CTAGAAAAAGTACAAGGCTTTGATGACTTCTGTGAAAGCTGAGGCAAAGGAACCAACACAAGCACCC  
 ACACAGTCAGCCTGACCCTCACACAGGACACTGACTGTGGGACTGCTGTTGAGCTGCCCGGGATGATAGA  
 GCAGTTTTCCACCCTGATCCGTCGTCAGATTTCCAATGACTTCCGGGACCTGCCACGCTGCTCATTCT  
 GGGTCGGAAGCCTGCCTGATGTCCTCATCATTGGCTTCTTTACTACGGCCATGGGGCCAAGCAGCTCT  
 CCTTCATGGACACAGCAGCCCTCCTCTTCATGATAGGGGCGCTCATTCTTTCAATGTCATCCTGGATGT  
 CGTCTCCAAATGTCACCTCGGAGAGGTCAATGCTGTACTATGAGCTGGAAGACGGGCTGTACACTGCTGGT  
 CCTTATTTCTTTGCCAAGATCCTAGGAGAATTGCCGGAGCACTGTGCTACGTATCATCTACGCGATGC  
 CCATCTACTGGCTGACAAACCTGCGGCCCGTGCCTGAGCTTCTCCTTCTACACTTCTGCTCGTGTGGT  
 GGTGGTCTTCTGCTGCAGGACCATGGCCCTGGCTGCCTTGCATGCTGCCACCTTCCACATGCTCTCC  
 TTCTTCTGCAATGCCCTCTACAACCTCTTACCTTACTGCCGGTTCATGATAAATTGGACAACCTGT  
 GGATAGTGCTGCATGGATCTCCAAGCTGTCGTTCCCTCCGGTGGTCTTCTCGGGGCTGATGCAGATTCA  
 ATTTAATGGACACCTTTACACCACAAATCGGCAACTTACCTTCTCCATCCTCGGAGACAGGATGATC  
 AGTGCCATGGACCTGAACTCGCATCCACTCTATGCGATCTACCTCATTGTATCGGCATCAGCTACGGCT  
 TCCTGTTCTGTACTATCTATCCTTGAAGCTCATCAAACAGAAGTCAATTCAAGACTGG**TGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-Mlul  
**ACCN:** NM\_026180  
**Insert Size:** 2022 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**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:** [NM\\_026180.3](#), [NP\\_080456.1](#)

**RefSeq Size:** 3684 bp

**RefSeq ORF:** 2022 bp

**Locus ID:** 67470

**UniProt ID:** [Q9DBM0](#)

**Cytogenetics:** 17 55.02 cM

**Gene Summary:**

ABCG5 and ABCG8 form an obligate heterodimer that mediates Mg(2+)- and ATP-dependent sterol transport across the cell membrane (PubMed:16352607, PubMed:16867993, PubMed:18402465). Plays an essential role in the selective transport of the dietary cholesterol in and out of the enterocytes and in the selective sterol excretion by the liver into bile (PubMed:12444248, PubMed:14504269, PubMed:14657202, PubMed:25378657). Plays an important role in preventing the accumulation of dietary plant sterols in the body (PubMed:12444248, PubMed:14657202). Required for normal sterol homeostasis (PubMed:12444248, PubMed:14657202). The heterodimer with ABCG5 has ATPase activity (PubMed:16352607, PubMed:16867993).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longer isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.