

Product datasheet for **MR227387**

Abcg8 (NM_026180) Mouse Tagged ORF Clone

Product data:

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



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ORF Nucleotide Sequence:

>MR227387 representing NM_026180
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTGAGAAAACCAAGAAGAGACCCAGCTGTGGAATGGGACTGTACTTCAGGATGCTTCGACAGGCC
 TCCAGGACAGCTTGTTCCTCGGAAAGTGACAACAGTCTGTACTTCACCTACAGTGGTCAGTCCAACAC
 TCTGGAGGTCAGAGATCTCACCTACCAGGTGGACATCGCCTCTCAGGTGCCTTGGTTTGAGCAGCTGGCT
 CAGTTCAAGATACCCTGGAGGTCTCATAGCAGCCAAGACTCCTGTGAGCTGGGCATCCGAAATCTAAGCT
 TCAAAGTGAGGAGTGGACAGATGCTGGCCATCATAGGGAGCTCAGGCTGCGGGAGAGCCTCACTACTCGA
 CGTGATCACAGGCAGAGGCCACGGTGGCAAGATGAAATCAGGACAAATTTGGATAAATGGCAACCCAGT
 ACGCCTCAGCTGGTGAGGAAGTGCCTTGCATGTGCGGCAGCATGACCAACTGTCGCCAACCTGACCG
 TCAGAGAGACCCTGGCTTTCATTGCCAGATGCGCCTGCCAGGACCTTCTCCAGGCCAGCGTGACAA
 ACGGGTGAAGACGTAATCGCCGAGCTGCGGCTGCGGCAGTGCGCCAACACCAGAGTGGCAACACGAT
 GTACGTGGGGTGTCCGGGGTGAGCGCCAGCAGTGTGAGCATTGGGGTGCAGCTCCTGTGGAACCCAGGAA
 TCCTCATTCTGGATGAACCCACTTCTGGCCTCGACAGCTTCACAGCCACAATCTGGTGACAACCTTGTC
 CCGCCTGGCCAAGGGCAACAGGCTGGTGCTCATCTCCCTCCACCAGCCTCGCTCTGACATCTTCAGGCTA
 TTTGACCTGGTCTTCTGATGACATCTGGCACCCCTATCTACCTGGGGCGGCGCAGCAAATGGTGCAGT
 ACTTCACATCCATTGGCCACCCTTGTCTCGCTATAGCAACCTGCGGACTTCTACGTGGACTTGACCAG
 CATCGACAGACGCAAGAACGGGAGGTGGCCACCCTGGAGAAGGCACAGTCTTTGCAGCCCTGTTT
 CTAGAAAAAGTACAAGGCTTTGATGACTTCTGTGAAAGCTGAGGCAAAGGAACCAACACAAGCACCC
 ACACAGTCAGCCTGACCCTCACACAGGACACTGACTGTGGGACTGCTGTTGAGCTGCCCGGGATGATAGA
 GCAGTTTTCCACCCTGATCCGTCGTCAGATTTCCAATGACTTCCGGGACCTGCCACGCTGCTCATTCTAT
 GGGTCGGAAGCCTGCCTGATGTCCTCATCATTGGCTTCTTTACTACGGCCATGGGGCCAAGCAGCTCT
 CCTTCATGGACACAGCAGCCCTCCTTTCATGATAGGGGCGCTCATTCTTTCAATGTCATCCTGGATGT
 CGTCTCCAAATGTCACCTCGGAGAGGTCAATGCTGTACTATGAGCTGGAAGACGGGCTGTACACTGCTGGT
 CCTTATTTCTTTGCCAAGATCCTAGGAGAATTGCCGGAGCACTGTGCCTACGTATCATCTACGCGATGC
 CCATCTACTGGCTGACAAACCTGCGGCCCGTGCCTGAGCTTCTCCTTCTACACTTCTGCTCGTGTGGTT
 GGTGGTCTTCTGCTGCAGGACCATGGCCCTGGCTGCCTTGCATGCTGCCACCTTCCACATGTCCTCC
 TTCTTCTGCAATGCCCTCTACAACCTCTTACCTTACTGCCGGTTCATGATAAACTTGGACAACCTGT
 GGATAGTGCCCTGCATGGATCTCCAAGCTGTCGTTCTCCGGTGGTCTTCTCGGGGCTGATGCAGATTCA
 ATTTAATGGACACCTTTACACCACAAAATCGGCAACTTCACCTTCTCCATCCTCGGAGACAGATGATC
 AGTGCCATGGACCTGAACTCGCATCCACTCTATGCGATCTACCTCATTGTATCGGCATCAGCTACGGCT
 TCCTGTTCTGTACTATCTATCCTTGAAGCTCATCAAACAGAAGTCAATTCAGACTGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR227387 representing NM_026180
 Red=Cloning site Green=Tags(s)

MAEKTKEETQLWNGTVLQDASQGLQDSLFSSESDNSLYFTYSGQSNTLEVRDLTYQVDIASQVPWFQELA
 QFKIPWRSHSSQDSCELGIRNLSFKVRSQMLAIIIGSSGCGRASLLDVITGRGHGKMKSGQIWIWQPS
 TPQLVRKCVAVHRQHDQLLPNLTVRETLAFIAQMRLPRTFSQAQRDKRVEDVIAELRLRQCANTRVGNTY
 VRGVSGGERRRVSIGVQLLWNPGLILDEPTSGLDSFTAHLNVTLSRLAKGNRLVLISLHQPRSDIFRL
 FDLVLLMTSGTPIYLGAAQMQVYFTSIGHPCPRYSNPADFYVDLTSIDRRSKEREVATVEKAQSLAALF
 LEKVQGFDDFLWKAEAKELNTSTHTVSLTLTQDTCGTAVELPGMIEQFSTLIRRQISNDFRDLPTLLIH
 GSEACLMSLIIGFLYGHGAKQLSFMDTAALLFMIGALIPFNVIDVVSCKHSERSMLYELEDGLYTAG
 PYFFAKILGELPEHCAYVIIYAMPIYWLNLRPVPELFLHFLLVLVVFCRTMALAASAMLPFHMSS
 FFCNALYNSFYLTAGFMINLDNLWIVPAWISKLSFLRWCFSGLMQIQFNHGLYTTQIGNFTFSILGDTMI
 SAMDLNSHPLYAIYLVIGISYGFLLYLSLKLKIKQKSIQDW

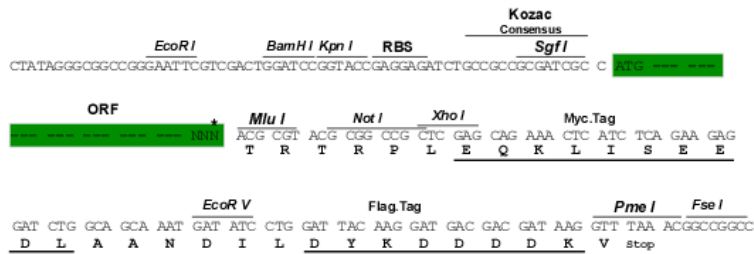
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9013_h09.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



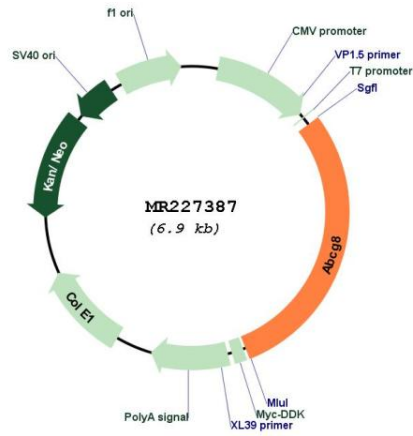
* The last codon before the Stop codon of the ORF

ACCN: NM_026180

ORF Size: 2019 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 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
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:	<ol style="list-style-type: none"> 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:	3674 bp
RefSeq ORF:	2022 bp
Locus ID:	67470
UniProt ID:	Q9DBM0
Cytogenetics:	17 55.02 cM
MW:	76.4 kDa
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]

Product images:



Circular map for MR227387