OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MR230461

Abcg8 (NM_001286005) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Abcg8 (NM_001286005) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Abcg8
Synonyms:	1300003C16Rik; AI114946; sterolin-2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

View online »

ORF Nucleotide Sequence:

>MR230461 representing NM_001286005
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAATCAGGACAAATTTGGATAAATGGGCAACCCAGTACGCCTCAGCTGGTGAGGAAGTGCGTTGCGC
ATGTGCGGCAGCATGACCAACTGCTGCCCAACCTGACCGTCAGAGAGACCCTGGCTTTCATTGCCCAGAT
GCGCCTGCCCAGGACCTTCTCCCAGGCCCAGCGTGACAAACGGGTGGAAGACGTAATCGCCGAGCTGCGG
CTGCGGCAGTGCGCCAACACCAGAGTGGGCAACACGTATGTACGTGGGGTGTCCGGGGGTGAGCGCCGAC
GAGTGAGCATTGGGGTGCAGCTCCTGTGGAACCCAGGAATCCTCATTCTGGATGAACCCACTTCTGGCCT
CGACAGCTTCACAGCCCACAATCTGGTGACAACCTTGTCCCGCCTGGCCAAGGGCAACAGGCTGGTGCTC
ATCTCCCTCCACCAGCCTCGCTCTGACATCTTCAGGCTATTTGACCTGGTCCTTCTGATGACATCTGGCA
CCCCTATCTACCTGGGGGCGGCGCAGCAAATGGTGCAGTACTTCACATCCATTGGCCACCCTTGTCCTCG
CTATAGCAACCCTGCGGACTTCTACGTGGACTTGACCAGCATCGACAGACGCAGCAAAGAACGGGAGGTG
GCCACCGTGGAGAAGGCACAGTCTCTTGCAGCCCTGTTCCTAGAAAAAGTACAAGGCTTTGATGACTTTC
TGTGGAAAGCTGAGGCAAAGGAACTCAACACAAGCACCCACACAGTCAGCCTGACCCTCACACAGGACAC
TGACTGTGGGACTGCTGTTGAGCTGCCCGGGATGATAGAGCAGTTTTCCACCCTGATCCGTCGTCAGATT
TCCAATGACTTCCGGGACCTGCCCACGCTGCTCATTCATGGGTCGGAAGCCTGCCTGATGTCCCTCATCA
TTGGCTTCCTTTACTACGGCCATGGGGCCAAGCAGCTCTCCTTCATGGACACAGCAGCCCTCCTCTTCAT
GATAGGGGCGCTCATTCCTTTCAATGTCATCCTGGATGTCGTCTCCAAATGTCACTCGGAGAGGTCAATG
CTGTACTATGAGCTGGAAGACGGGCTGTACACTGCTGGTCCTTATTTCTTTGCCAAGATCCTAGGAGAAT
TGCCGGAGCACTGTGCCTACGTCATCATCTACGCGATGCCCATCTACTGGCTGACAAACCTGCGGCCCGT
GCCTGAGCTCTTCCTTCTACACTTCCTGCTCGTGTGGTTGGTGGTCTTCTGCTGCAGGACCATGGCCCTG
GCTGCCTCTGCCATGCTGCCCACCTTCCACATGTCCTCCTTCTTCTGCAATGCCCTCTACAACTCCTTCT
ACCTTACTGCCGGCTTCATGATAAACTTGGACAACCTGTGGATAGTGCCTGCATGGATCTCCAAGCTGTC
GTTCCTCCGGTGGTGCTTCTCGGGGCTGATGCAGATTCAATTTAATGGACACCTTTACACCACACAAATC
GGCAACTTCACCTTCTCCATCCTCGGAGACACGATGATCAGTGCCATGGACCTGAACTCGCATCCACTCT
ATGCGATCTACCTCATTGTCATCGGCATCAGCTACGGCTTCCTGTTCCTGTACTATCTATCCTTGAAGCT
CATCAAACAGAAGTCAATTCAAGACTGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

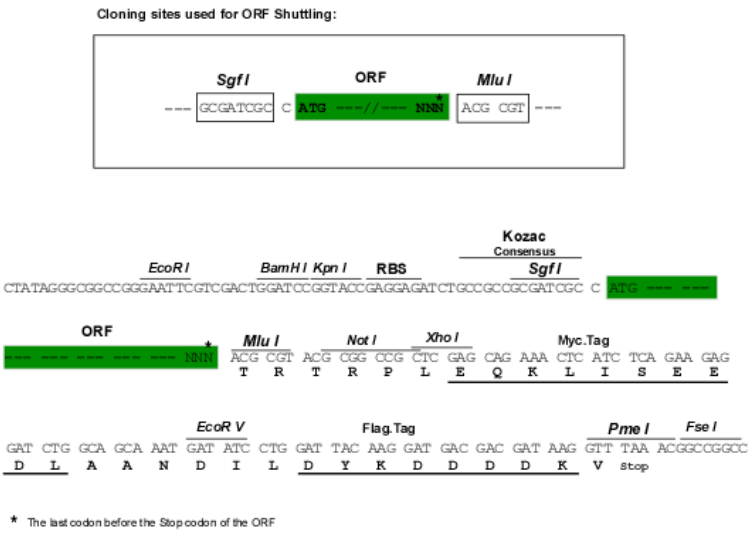
>MR230461 representing NM_001286005
Red=Cloning site Green=Tags(s)

MKSGQIWINGQPSTPQLVRKCVAHVRQHDQLLPNLTVRETLAFIAQMRLPRTFSQAQRDKRVEDVIAELR
LRQCANTRVGNTYVRGVSGGERRRVSIGVQLLWNPGILILDEPTSGLDSFTAHNLVTTLSRLAKGNRLVL
ISLHQPRSDIFRLFDLVLLMTSGTPIYLGAAQQMVQYFTSIGHPCPRYSNPADFYVDLTSIDRRSKEREV
ATVEKAQSLAALFLEKVQGFDDFLWKAEAKELNTSTHTVSLTLTQDTDCGTAVELPGMIEQFSTLIRRQI
SNDFRDLPTLLIHGSEACLMSLIIGFLYYGHGAKQLSFMDTAALLFMIGALIPFNVILDVVSKCHSERSM
LYYELEDGLYTAGPYFFAKILGELPEHCAYVIIYAMPIYWLTNLRPVPELFLLHFLLVWLVVFCCRTMAL
AASAMLPTFHMSSFFCNALYNSFYLTAGFMINLDNLWIVPAWISKLSFLRWCFSGLMQIQFNGHLYTTQI
GNFTFSILGDTMISAMDLNSHPLYAIYLIVIGISYGFLFLYYLSLKLIKQKSIQDW

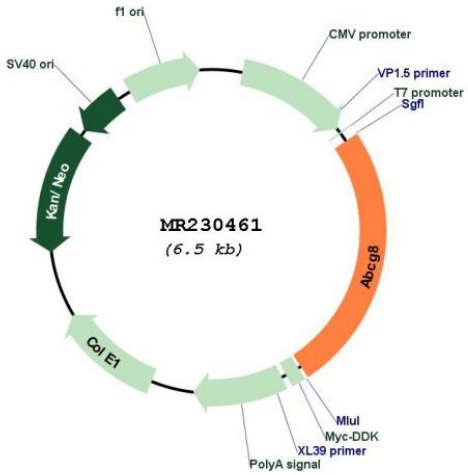
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001286005
ORF Size:	1638 bp
OTI Disclaimer:	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:	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_001286005.1, NP_001272934.1
RefSeq Size:	3432 bp
RefSeq ORF:	1641 bp
Locus ID:	67470
UniProt ID:	Q9DBM0
Cytogenetics:	17 55.02 cM
MW:	62.4 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]