

Product datasheet for **RG221834**

ABCG1 (NM_004915) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ABCG1 (NM_004915) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ABCG1
Synonyms:	ABC8; WHITE1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG221834 representing NM_004915
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCTGTCTGATGGCCGCTTTCTCGGTCCGCACCGCCATGAATGCCAGCAGTTACTCTGCAGAGATGA
 CGGAGCCCAAGTCGGTGTGTCTCGGTGGATGAGGTGGTGTCCAGCAACATGGAGGCCACTGAGACGGA
 CCTGCTGAATGGACATCTGAAAAAGTAGATAATAACCTCACGGAAGCCAGCGCTTCTCCTCCTTGCCT
 CGGAGGGCAGCTGTGAACATTGAATTCAGGGACCTTTCCTATTCGGTTCCTGAAGGACCCTGGTGGAGGA
 AGAAAGGATACAAGACCCTCCTGAAAGGAATTTCCGGGAAGTCAATAGTGGTGAAGTGGTGGCCATTAT
 GGGTCTTCCGGGGCCGGGAAGTCCACGCTGATGAACATCCTGGCTGGATACAGGGAGACGGGCATGAAG
 GGGGCCGCTCATCAACGGCCTGCCCGGGACCTGCGCTGCTCCGGAAGGTGCTCTGCTACATCATGC
 AGGATGACATGCTGCTGCCGCATCTCACTGTGCAGGAGGCCATGATGGTGTCCGCACATCTGAAGCTTCA
 GGAGAAGGATGAAGGCAGAAGGGAAATGGTCAAGGAGATACTGACAGCGCTGGGCTTGTGTCTTCCGCC
 AACACGGCGGACCCGGGAGCCTGTCAGGTGGTCAGCGCAAGCGCCTGGCCATCGCGCTGGAGCTGGTGAACA
 ACCCTCCAGTCATGTTCTTCGATGAGCCACCAGCGGCCTGGACAGCGCCTCCTGCTTCCAGGTGGTCTC
 GCTGATGAAAGGGCTCGCTCAAGGGGGTTCGCTCCATCATTTGCACCATCCACCAGCCAGCGCCAAACTC
 TTCGAGCTGTTCCAGCAGCTTACGCTCTGAGTCAAGGACAATGTGTGTACCGGGGAAAAGTCTGCAATC
 TTGTGCCATATTTGAGGGATTTGGGTCTGAACTGCCAACCTACCACAACCCAGCAGATTTTGTGATGGA
 GGTGTCATCCGGCGAGTACGGTATCAGAACAGTCGGCTGGTGAAGCGGTTCCGGAGGGCATGTGTGAC
 TCAGACCACAAGAGAGACCTCGGGGTGATGCCGAGGTGAACCTTTTCTTTGGCACCGGCCCTCTGAAG
 AGGTAAGCAGACAAAACGATTAAGGGGTTGAGAAAGGACTCCTCGTCCATGGAAGGCTGCCACAGCTT
 CTCTGCCAGCTGCCTCACGCAGTTCTGCATCCTCTTCAAGAGGACCTTCTCAGCATCATGAGGGACTCG
 GTCCTGACACACCTGCGCATCACCTCGCACATTGGGATCGGCCTCCTCATTGGCCTGCTGTACTTGGGA
 TCGGGAACGAAGCCAAGAAGGTCTTGAAGCAACTCCGGCTTCTCTTCTCCATGCTGTTCTCATGTT
 CGCGGCCCTCATGCCTACTGTTCTGACATTTCCCTGGAGATGGGAGTCTTTCTCGGGAACACCTGAAC
 TACTGGTACAGCCTGAAGGCCTACTACCTGGCCAAGACCATGGCAGACGTGCCCTTTCAGATCATGTTCC
 CAGTGGCCTACTGCAGCATCGTACTGGATGACGTCCGACCCGTCGACGCCGTGGCCTTGTGCTGTT
 TGCCCGCTGGGACCATGACCTCCCTGGTGGCACAGTCCCTGGCCTGCTGATCGGAGCCGCCTCCAGC
 TCCTGACAGTGGCCACTTTCGTGGGCCAGTGACAGCCATCCCGGTGCTCCTGTTCTCGGGTTCTTCG
 TCAGTTTCGACACCATCCCACGTACCTACAGTGGATGTCTACATCTCCTATGTGAGGTATGGGTTCGA
 AGGGGTATCCTCTCATCTATGGCTTAGACCGGGAAGATCTGCACTGTGACATCGACGAGACGTGCCAC
 TTCCAGAAGTCGGAGGCCATCCTGCGGGAGCTGGACGTGGAAAATGCCAAGCTGTACCTGGACTTATCG
 TACTCGGATTTTCTTCTCCTCCGCTCATTGCCTATTTTGTCTCAGGTACAAAATCCGGGCAGAG
 GAGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG221834 representing NM_004915
 Red=Cloning site Green=Tags(s)

MACLMAAFSVGTAMNASSYSAEMTEPKSVCVSVDEVVSSNMEATETDLLNGHLKKVDNNL TEAQRFS
 RRAAVNIEFRDLSYVPEGPWWRKKGYKTLLKGISGKFNSGELVAIMGPSGAGKSTLMNLAGYRETGMK
 GAVLINGLPRDLRCFRKVSICYIMQDDMLLPHLTVQEAMMVAHLKLQEKDEGRREMVKEILTALGLLSCA
 NTRTGSLSGGQRKRLAIALELVNPPVMFFDEPTSGLDSASCFQVVSMLMKGLAQGGRSIICTIHQPSAKL
 FELFDQLYVLSQGQCVRGKVCNLVPYLRDLGLNCPTYHNPADFVMEVASGEYGDQNSRLVRVREGMCD
 SDHKRDLGGDAEVPFLWHRPSEEVKQTKRLKGLRKDSSSMEGCHSFASCLTQFCILFKRTFLSIMRDS
 VLTHLRITSHIGIGLLIGLLYLIGIGNEAKKVLNSGFLFFSMLFLMFAALMPTVLTFPLEMGVFLREHLN
 YWYSLKAYYLAKTMAVDPFQIMFPVAYCSIVYWMTSQPSDAVRFVLAALGTMTSLVAQSLGLLIGAAS
 SLQVATFVGPVTAIPVLLFSGFFVSFDTIPTYLQWMSYISVYRYGFEVILSIYGLDREDLHCDIDETCH
 FQKSEAILRELDVENAKLYLDFIVLGIFFISLRLIAYFVLRKYKIRAER

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_004915

ORF Size: 2034 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:

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_004915.3](#), [NP_004906.3](#)

RefSeq Size: 3018 bp

RefSeq ORF: 2037 bp

Locus ID: 9619

UniProt ID: [P45844](#)

Cytogenetics: 21q22.3

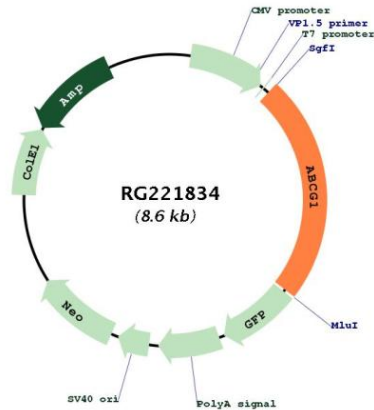
Domains: ABC_tran, AAA

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: ABC transporters

Gene Summary:

The protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the White subfamily. It is involved in macrophage cholesterol and phospholipids transport, and may regulate cellular lipid homeostasis in other cell types. Six alternative splice variants have been identified. [provided by RefSeq, Jul 2008]

Product images:


Circular map for RG221834