

Product datasheet for **RG220827**

ABCG8 (NM_022437) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ABCG8 (NM_022437) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ABCG8
Synonyms:	GBD4; STSL; STSL1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RG220827 representing NM_022437
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGGCCGGAAGCGCCAGAGGAGAGGGCTGCCAAAGGGGCCACTCCCAGCATACCTCGGGCCTCC
AGGATAGATTGTTCTCCTCTGAAAGTGACAACAGCCTGTACTTCACCTACAGTGGCCAGCCAACACCCCT
GGAGGTACAGACCTCAACTACCAGGTGGACTGGCCTCTCAGGTCCTTGGTTTGGAGCAGCTGGCTCAG
TTCAAGATGCCCTGGACATCTCCAGCTGCCAGAATTCTGTGAGCTGGGCATCCAGAACCTAAGCTTCA
AAGTGAGAAGTGGGCAGATGCTGGCCATCATAGGGAGCTCAGGTTGTGGGAGAGCCTCCTTGCTAGATGT
GATCACTGGCCGAGGTACGCGCGCAAGATCAAGTCAGGCCAGATCTGGATCAATGGGCAGCCAGCTCG
CCTCAGCTGGTGAGGAAGTGTGGCCACGTGCGCCAGCACAACCAGCTGCTCCCCAATTGACTGTGC
GAGAGACCTTGGCCTTATTGCCAGATGCGGCTGCCAGAACCCTCTCCAGGCCAGCGTGACAAAAG
GGTGGAGGACGTGATCGCGGAGCTGCGGCTTAGGCAGTGGCTGACACCCGCGTGGGCAACATGTACGTG
CGGGGGTTGTGGGGGGTGGAGCGCAGGAGATCAGCATTGGGGTGCAGCTCCTGTGGAACCCAGGAATCC
TTATTCTCGACGAACCCACCTCTGGGCTCGACAGCTTACAGCCACAACCTGGTGAAGACCTTGTCCAG
GCTGGCCAAAGGCAACCGGCTGGTGTCTCATCTCCCTCCACCAGCCTCGCTCTGACATCTTCAGGCTGTT
GATCTGGTCTCCTGATGACGTCTGGCACCCCATCTACTTAGGGGCGGCCAGCACATGGTCCAGTATT
TCACAGCCATCGGCTACCCCTGTCTCGCTACAGCAATCTGTGACTTCTATGTGGACCTGACCAGCAT
TGACAGGCGCAGCAGAGAGCAGGAATTGGCCACCAGGGAGAAGGCTCAGTCACTCGCAGCCCTGTTTCTA
GAAAAAGTGGCTGACTTAGATGACTTTCTATGGAAAGCAGAGACGAAGGATCTTGACGAGGACACCTGTG
TGGAAAGCAGCGTGACCCCACTAGACACCAACTGCCTCCCGAGTCTACGAAGATGCCTGGGGCGGTGCA
GCAGTTTACGACGCTGATCCGTCGTGAGTTTCCAACGACTTCCGAGACCTGCCACCCCTCTCATCCAT
GGGGCGGAGGCTGTCTGATGTCAATGACCATCGGCTTCTCTATTTTGGCCATGGGAGCATCCAGCTCT
CCTTCATGGATACAGCCGCCCTTGTTCATGATCGGTGCTCTCATCCCTTCAACGTCATTCTGGATGT
CATCTCCAAATGTTACTCAGAGAGGGCAATGCTTACTATGAACTGGAAGACGGGCTGTACACCACTGGT
CCATATTTCTTTGCCAAGATCCTCGGGGAGCTTCCGGAGCACTGTGCCTACATCATCTACGGGATGC
CCACCTACTGGCTGGCCAACTGAGGCCAGGCCTCCAGCCCTTCTGCTGCACCTTCTGCTGGTGTGGCT
GGTGGTCTTCTGTTGCAGGATTATGGCCCTGGCCGCCGCGCCCTGCTCCCCACCTTCCACATGGCCTCC
TTCTTCAGCAATGCCCTCACTCACTCTTACCTCGCCGGGGGCTTCATGATAAACTTGAGCAGCCTGT
GGACAGTGCCCGGTGGATTTCCAAAGTGCCTTCTGCGGTGGTGTGTTTGAAGGCTGATGAAGATTCA
GTTCAGCAGAAGAACTTATAAAATGCCTCTCGGGAACCTCACCATCGCGGTCTCAGGAGATAAAATCCTC
AGTGCCATGGAGCTGGACTCGTACCCTCTACGCCATCTACCTCATCGTCATTGGCCTCAGCGGTGGCT
TCATGGTCTGTACTACGTGTCTTAAGGTTTCATCAAACAGAAACCAAGTCAAGACTGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG220827 representing NM_022437
 Red=Cloning site Green=Tags(s)

MAGKAAEERGLPKGATPQHTSGLQDRLFSSSESDNSLYFTYSGQPNTLEVRDLNYQVDLASQVPWFELAQ
 FKMPWTSPSCQNSCELGIQNLSFKVRSQMLAIIIGSSGCGRASLLDVITGRGHGGKIKSGQIWINQPS
 PQLVRKCAHVROHNQLLPNLTVRETLAFIAQMRLPRTFSQAQRDKRVEDVIAELRLRQCADTRVGNMYV
 RGLSGGERRRVSIGVQLLWNPGLILDEPTSGLDSFTAHLVKTL SRLAKGNRLVLI SLHQPRSDIFRLF
 DLVLLMTSGTPIYLGAAQHMVQYFTAIGYPCPRYSNPADFYVDLTSIDRRSREQELATREKAQSLAALFL
 EKVRDLDDFLWKAETKDLDEDTCEVSSVPLDTNCLPSPTKMPGAVQQFTTLIRRQISNDFRDLPTLLIH
 GAEACLSMTIGFLYFGHSGIQLSFMDTAALLFMIGALIPFNVIDVISKCYSERAMLYELEDGLYTTG
 PYFFAKILGELPEHCAYII IYGMPYWL ANLRPGLQPFLHFLLVWL VVFCRIMALAAAALLPTFHMAS
 FFSNALYNSFYLAGGFMINLSSLWTPAWISKVSFLRWCFEGLMKIQFSRRTYKMPLGNLTI AVSGDKIL
 SAMELDSYPLYAIYLIVIGLSGGFMVLYVSLRFIKQKPSQDW

TRTRPLE - GFP Tag - V

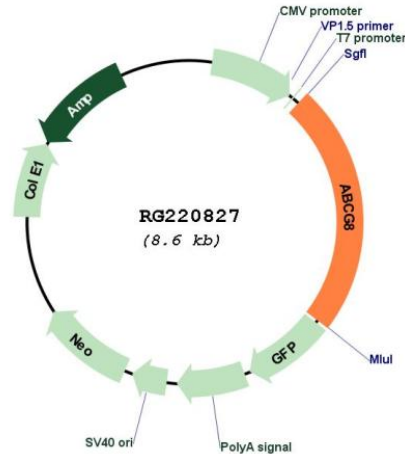
Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:


ACCN: NM_022437

ORF Size: 2019 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_022437.2](#), [NP_071882.1](#)

RefSeq Size:	2679 bp
RefSeq ORF:	2022 bp
Locus ID:	64241
UniProt ID:	Q9H221
Cytogenetics:	2p21
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	ABC transporters
Gene Summary:	<p>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. The protein encoded by this gene functions to exclude non-cholesterol sterol entry at the intestinal level, promote excretion of cholesterol and sterols into bile, and to facilitate transport of sterols back into the intestinal lumen. It is expressed in a tissue-specific manner in the liver, intestine, and gallbladder. This gene is tandemly arrayed on chromosome 2, in a head-to-head orientation with family member ABCG5. Mutations in this gene may contribute to sterol accumulation and atherosclerosis, and have been observed in patients with sitosterolemia. [provided by RefSeq, Jul 2008]</p>