

## Product datasheet for **SC311404**

### ABCG8 (NM\_022437) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ABCG8 (NM_022437) Human Untagged Clone
Tag:	Tag Free
Symbol:	ABCG8
Synonyms:	GBD4; STSL; STSL1
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:**

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>OriGene sequence for NM_022437 edited
ATGGCCGGGAAGGCGGCAGAGGAGAGAGGGCTGCCGAAAGGGGCCACTCCCCAGGATACC
TCGGGCCCTCCAGGATAGATTGTTCTCCTCTGAAAGTGACAACAGCCTGTACTTCACCTAC
AGTGGCCAGCCCAACACCTGGAGGTGACAGACCTCAACTGCCAGGTGGACTGGCCTCT
CAGGTCCTTTGGTTTGGCAGCTGGCTCAGTTCAAGATGCCCTGGACATCTCCAGCTGC
CAGAATCTTGTGAGCTGGGCATCCAGAACCTAAGCTTCAAAGTGAGAAGTGGGCAGATG
CTGGCCATCATAGGGAGCTCAGGTTGTGGGAGAGCCTCCTTGCTAGATGTGATCACTGGC
CGAGGTCACGGCGCAAGATCAAGTCAGGCCAGATCTGGATCAATGGGCAGCCAGCTCG
CCTCAGCTGGTGAGGAAGTGTGTGGCCACGTGCGCCAGCACAACCAGCTGCTCCCCAAC
TTGACTGTGCGAGAGACCTTGGCCTTATTGCCAGATGCGGCTGCCCAGAACCTTCTCC
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GTCAGCATTGGGGTGCAGCTCCTGTGGAACCCAGGAATCCTTATTCTCGACGAACCCACC
TCTGGGCTCGACAGCTTACAGCCCAACCTGGTGAAGACCTTGTCCAGGCTGGCCAAA
GGCAACCGGCTGGTGTCTATCTCCCTCCACCAGCCTCGCTGACATCTTCAGGCTGTTT
GATCTGGTCTCCTGATGACGTCTGGCACCCCATCTACTTAGGGGCGGCCAGCACATG
GTCAGTATTTACAGCCATCGGCTACCCCTGTCTCGCTACAGCAATCCTGCTGACTTC
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ACCATCGCGTCTCAGGAGATAAAATCCTCAGTGCCATGGAGCTGGACTCGTACCCTCTC
TACGCCATCTACCTCATCGTCATTGGCCTCAGCGGTGGCTTATGGTCTGTACTACGTG
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CCATCAATACAGAAAGTGACCTAAGATGTACCAGCAAGATGCCATCCCTTCTTTTGTGT
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TTATAGGTGTAAAACACTGAAGCAAAAATTCATTTTCTTAAGGGCAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAA
    
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<b>5' Read Nucleotide Sequence:</b>	<pre>&gt;OriGene 5' read for NM_022437 unedited NNGGTTTAGTTTCAGAATTGTATACCATCATATAGGCGGCCGNAATTCGCACGAGGATG GCCGGGAAGGCGGCAGAGAGAGAGGCTGCCGAAGGGGCCACTCCCAGGATACCTCGGGC CTCCAGGATAGATTGTTCTCCTCTGAAAGTGACAACAGCCTGTACTTCACCTACAGTGGC CAGCCCAACACCTGGAGGTCAGAGACCTCAACTGCCAGGTGGACCTGGCCTCTCAGGTC CCTTGGTTTGAGCAGCTGGCTCAGTTCAGATGCCCTGGACATCTCCCAGCTGCCAGAAT TCTTGTGAGCTGGGCATCCAGAACCTAAGCTTCAAAGTGAGAAGTGGGCAGATGCTGGCC ATCATAGGGAGCTCAGGTTGTGGGAGAGCCTCCTTGTAGATGTGATCACTGGCCGAGGT CACGGCGCAAGATCAAGTCAGGCCAGATCTGGATCAATGGGCAGCCAGCTCGCCTCAG CTGGTGAGGAAGTGTGTGGCCACGTGCGCCAGCACAAACCAGCTGCTCCCAACTTGACT GTGCGAGAGACCTTGGCCTTCATTGCCAGATGCGGCTGCCAGAACCTTCTCCCAGGCC CAGCGTGACAAAAGGGTGGAGGACGTGATCGCGGAGCTGCGGCTTAAGCAGTGCCTGAC ACCCGCGTGGGCAACATGTACGTGCGGNGGTTGTNCGGGGTGAGCGCANGAGAGTCAGC ATTTGGGTGCAGTCTGTGNGACCCAGGAATCCTTATTCTCGACGCCACCTCTGGGC TCGACAGCTTACAGCCACAACCTGGTAAAGACCCTGTNCAGNCTGGCCAAAGGCACC CGC</pre>
<b>3' Read Nucleotide Sequence:</b>	<pre>&gt;OriGene 3' genomic read for NM_022437 unedited CCTTGGGGTGGCAATCCCAATCCAGNNGNAGCACTGGGGCGGGTACAGGGNTGCCAC CCGGGATCTGTTCCAGAAAAGCTATGACCGCGCCGCAATCTAGAGTCGAGTTTTTTTTT TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTGCCTTAGGAAAATGAATTTTTGCTT AGTTTTACACCTATAAAATGGGATACCATTTTCTCAAGGGATTGTCCACCTAAAGTGT TTTCACAGGACCTGCTACAGAGTAAATGCTCAATACATTTTAATTGTTACGTTGGCTT TTGGAGCCATGACCCCAACAAAAAGAAAGGGATGGCATCTTGCTGGGACATCTTAAGTC ACTTCTGTATTGGTGGGGGCTCACACGGAGTGTGGGGCCCTGGAAGATGAAGCCAAA TCTGCTAGCTACTGGTATTGTTCCCTCCAGGTTCCAACAATTCCTGGACAGTCTAGCTAC CCAATTCATTCTAGTTTGTCCCATCCTATATCGAGTTGCCTATATTAATGCCTATCAA AAGGGAATAAATTAGCAACGTTGTAGGTGCCACCGAGTGCAGGTTTTCTCCAGTCATCG CAGTCTCCTGCCAGGGAGCAGAAATCCCTTTGGACTGCTTTATTTACTGGCCTCCTGG GGCTGGGCTGGGCCCTTGAGCACCTGGGCCGGATGTAACCTTGACCTTTGGGGGGCAT TGGCCTACTGTCCCAAGAAGGGGCTCCTGAAGGAGGGAGTGCAGTTTAAGGGTTTTGC TCAGTCCCCACCAAGGGGAAAACCTTTTTGGCGTGAATTACCAAGGTTTGGT</pre>
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_022437
<b>Insert Size:</b>	2800 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
<b>Components:</b>	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:** 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]

Transcript Variant: This variant (1) encodes the longer isoform (1).