

# **Product datasheet for SC305023**

# ABCG5 (NM\_022436) Human Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** ABCG5 (NM\_022436) Human Untagged Clone

Tag: Tag Free Symbol: ABCG5

Synonyms: STSL; STSL2

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

### OriGene Technologies, Inc.

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**Fully Sequenced ORF:** 

>NCBI ORF sequence for NM\_022436, the custom clone sequence may differ by one or more nucleotides

ATGGGTGACCTCTCATCTTTGACCCCCGGAGGGTCCATGGGTCTCCAAGTAAACAGAGGCTCCCAGAGCT CCCTGGAGGGGGCTCCTGCCACCGCCCCGGAGCCTCACAGCCTGGGCATCCTCCATGCCTCCTACAGCGT CAGCCACCGCGTGAGGCCCTGGTGGGACATCACATCTTGCCGGCAGCAGTGGACCAGGCAGATCCTCAAA GATGTCTCCTTGTACGTGGAGAGCGGGCAGATCATGTGCATCCTAGGAAGCTCAGGCTCCGGGAAAACCA CGCTGCTGGACGCCATGTCCGGGAGGCTGGGGGCGCGCGGGGACCTTCCTGGGGGAGGTGTATGTGAACGG CCGGGCGCTGCGCCGGGAGCAGTTCCAGGACTGCTTCTCCTACGTCCTGCAGAGCGACACCCTGCTGAGC AGCCTCACCGTGCGCGAGACGCTGCACTACACCGCGCTGCTGGCCATCCGCCGCGGCAATCCCGGCTCCT TCCAGAAGAAGGTGGAGGCCGTCATGGCAGAGCTGAGTCTGAGCCATGTGGCAGACCGACTGATTGGCAA CTACAGCTTGGGGGGCATTTCCACGGGTGAGCGGCGCCGGGTCTCCATCGCAGCCCAGCTGCTCCAGGAT CCTAAGGTCATGCTGTTTGATGAGCCAACCACAGGCCTGGACTGCATGACTGCTAATCAGATTGTCGTCC TCCTGGTGGAACTGGCTCGCAGGAACCGAATTGTGGTTCTCACCATTCACCAGCCCCGTTCTGAGCTTTT TCAGCTCTTTGACAAAATTGCCATCCTGAGCTTCGGAGAGCTGATTTTCTGTGGCACGCCAGCGGAAATG CTTGATTTCTTCAATGACTGCGGTTACCCTTGTCCTGAACATTCAAACCCTTTTGACTTCTATATGGACC TGACGTCAGTGGATACCCAAAGCAAGGAACGGGAAATAGAAACCTCCAAGAGAGTCCAGATGATAGAATC TGCCTACAAGAAATCAGCAATTTGTCATAAAACTTTGAAGAATATTGAAAGAATGAAACACCTGAAAACG TTACCAATGGTTCCTTTCAAAACCAAAGATTCTCCTGGAGTTTTCTCTAAACTGGGTGTTCTCCTGAGGA GAGTGACAAGAAACTTGGTGAGAAATAAGCTGGCAGTGATTACGCGTCTCCTTCAGAATCTGATCATGGG TTTGTTCCTCCTTTTCTTCGTTCTGCGGGTCCGAAGCAATGTGCTAAAGGGTGCTATCCAGGACCGCGTA GGTCTCCTTTACCAGTTTGTGGGCGCCACCCCGTACACAGGCATGCTGAACGCTGTGAATCTGTTTCCCG TGCTGCGAGCTGTCAGCGACCAGGAGAGTCAGGACGGCCTCTACCAGAAGTGGCAGATGATGCTGGCCTA TGCACTGCACGTCCTCCCCTTCAGCGTTGTTGCCACCATGATTTTCAGCAGTGTGTGCTACTGGACGCTG GGCTTACATCCTGAGGTTGCCCGATTTGGATATTTTTCTGCTGCTCTCTTGGCCCCCCCACTTAATTGGTG AATTTCTAACTCTTGTGCTACTTGGTATCGTCCAAAATCCAAATATAGTCAACAGTGTAGTGGCTCTGCT GTCCATTGCGGGGGTGCTTGTTGGATCTGGATTCCTCAGAAACATACAAGAAATGCCCATTCCTTTTAAA ATCATCAGTTATTTTACATTCCAAAAATATTGCAGTGAGATTCTTGTAGTCAATGAGTTCTACGGACTGA ATTTCACTTGTGGCAGCTCAAATGTTTCTGTGACAACTAATCCAATGTGTGCCTTCACTCAAGGAATTCA ATTCATTGAGAAAACCTGCCCAGGTGCAACATCTAGATTCACAATGAACTTTCTGATTTTGTATTCATTT ATTCCAGCTCTTGTCATCCTAGGAATAGTTGTTTTCAAAATAAGGGATCATCTCATTAGCAGGTAG

Restriction Sites: Please inquire
ACCN: NM\_022436
Insert Size: 2300 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 <a href="mailto:customercom">customercom</a> 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. <u>More info</u>

OTI Annotation: The open reading frame of this TrueClone was fully sequenced and found to be a perfect

match to the protein associated to this reference.

**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: <u>NM 022436.2</u>, <u>NP 071881.1</u>

 RefSeq Size:
 2740 bp

 RefSeq ORF:
 1956 bp

 Locus ID:
 64240

 UniProt ID:
 Q9H222

 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 as a half-transporter to limit intestinal absorption and promote biliary excretion of sterols. It is expressed in a tissue-specific manner in the liver, colon, and intestine. This gene is tandemly arrayed on chromosome 2, in a head-to-head orientation with family member ABCG8. Mutations in this gene may contribute to sterol accumulation and atheroschlerosis, and have been observed in patients with sitosterolemia. [provided by RefSeq, Jul 2008]