

Product datasheet for **SC115658**

ABCA8 (NM_007168) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ABCA8 (NM_007168) Human Untagged Clone
Tag:	Tag Free
Symbol:	ABCA8
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None
Fully Sequenced ORF:	>NCBI ORF sequence for NM_007168, the custom clone sequence may differ by one or more nucleotides

```
ATGAGGAAGAGAAAGATCAGTGTGTGCAACAACTTGGGCCTTATTATGCAAGAACTTTCTTAAAAAT
GGAGAATGAAAAGAGAGTCCTTAATGGAATGGCTGAATTCATTGCTCCTACTACTTTGTTGTATATATA
TCCTCATAGTCATCAAGTAAATGATTTTTCTTCACTGCTTACCATGGACCTGGGACGGGTAGATACATTT
AATGAATCCAGATTTTTCTGTTGTATACACACCTGTCACCAACGACCCAACAGATAATGAATAAGTAG
CCTCTACTCCCTTCTGGCAGGTAAGAGGTCTTGGGACTGCCAGATGAGGAAAGTATTAAGAATTCAC
AGCAAATTATCCTGAAGAAATAGTAAGAGTCACCTTTACTAATACATACTCATATCATTGGAAGTCTTG
CTAGGACATGGAATGCCAGCAAAGAAGGAGCACAAAGACCATACAGCTCATTGTTATGAAACAAATGAAG
ATGTTTACTGTGAAGTTTCAGTATTTTGAAGGAAGTTTTGTGGCTCTTCAAGCTGCCATTAATGCTGC
TATTATAGAAATCACAACAAATCACTCAGTGATGGAGGAGCTGATGTCAGTTACTGGAAAAATATGAAG
ATGCATTCCTTCATTGGTCAATCAGGAGTTATAACTGATTTGTACCTTTTTCTGCATTATTTCAATTT
CCTCATTCACTTACTATGCATCTGTTAATGTCACAAGAGAGAGGAAAAGGATGAAGGCCTTGATGACAAT
GATGGGTCTTCGGGATTCAGCGTTCTGGCTCTCCTGGGTTTGTCTATGCTGGTTTCATCTTCATTATG
GCCTTTTCTTGGCACTGTTATAAGATCTACCCAGTTTATCATTTTGTCTGGCTTCATGGTAGTCTTCA
GCCTCTTCTCCTGTATGGATTATCTTTGGTAGCTTTGGCTTTCTTAATGAGCATCTTGGTAAAGAAATC
TTTCTCACCGGCTGGTTCGTGTTCTCCTCACTGTCTTTTGGGGTGTCTGGGGTTCACATCACTGTAC
AGACACCTTCTGCATCCTTGGAGTGGATTTTAAGCTTGCTTAGTCCCTTGCCTTCATGCTTGGAAATGG
CCCAGCTTTTACACTGGACTATGATTTGAATTCATGCAATTCCTCATCCATCGGACGGCTCAAATCT
CATTGTAGCAACAAATTTCAATGTTGGCATTGACACTTGCCCTCTATCTGGCATTGGCGATTTACTTTGAA
AAAATTTGCCAAATGAATATGGACATCGACGTCCACCTTTGTTTTCTGAAGTCTCATTGTTGGTCTC
AAACACAAAAGACTGATCAGTGGCCCTTGAAGATGAAATGGATGCCGATCCTTCATTTCACTGACTCTT
TGAACAAGCGCCTCCAGAATCCAAGGAAAGAAGCCATCAGAAATCAGAAATGTTACAAAAGAATATAAA
GGAAAGCCTGATAAAATAGAAGCCTTGAAGATCTGGTATTTGACATTTACGAAGGCCAAATCACTGCAA
TACTTGGTCACAGTGGAGCTGGAAGTCAACACTGCTAAACATTCTTAGTGGTTGTCTGTTCCACCAA
AGGTTTCAGTCACCATCTATAACAATAAGCTTTAGAAATGGCTGACCTAGAAAATCTCAGCAAGCTGACC
GGAGTTTGTCCACAATCCAATGTGCAATTTGACTTCTCACTGTAAGAGAAAACCTCAGACTCTTTGCTA
AAATAAAAGGGATTCTGCCACAAGAAGTGGATAAAGAGATTTTCTGTTGGATGAACCACTGCTGGATT
```



[View online >](#)

GGATCCCTTTTCAAGACACCAAGTATGGAACCTTCTGAAAGAACGCAAAACAGACCGGTGATCCTCTTC
AGTACCCAGTTTCATGGATGAGGCCGACATCCTGGCGGACAGGAAAGTATTTCTCTCCAAGGGAAGCTAA
AGTGCCGGGGCTCTTCTTTGTTTCTAAAGAAGAAATGGGGGATTGGATATCACTTAAGCTTGCAGTTAAA
TGAAATATGTGTTGAGGAAAACATAACATCACTTGTAAACAGCACATCCCTGATGCCAAATTATCAGCC
AAAAGCGAAGGAAAACCTATTTATACATTACCCCTAGAAAAGAACAATAAATTTCCAGAAGTTTACAAGG
ATCTTGATAGCTATCCTGACCTAGGAATTGAGAATTATGGTGTTCATGACAACCTTGAATGAAGTATT
CCTGAAGCTAGAAGGAAAATCTACAATTAATGAATCGGACATTGCTATTTTGGGAGAAGTACAAGCGGAA
AAAGCTGACGACACTGAAAGGCTTGTGAGATGGAACAAGTCTCTTCACTTAACAAGATGAGAAGA
CAATAGGTGGTGTGGCTCTGCGGACAGCAAATCTGCGCAATTGCAAGGTTTCGCTTGTAAAGTTAAA
GCATGAAAGAAAAGCTCTTTAGCACTGCTATTAATTCTAATGGCTGGATTTTGCCTCTTCTTGTGGAG
TATACCATGGTAAAATATATCAAAACAGTTACACCTGGGAACCTTCTCCTCATTGTATTTCTTGTGCTC
CTGGACAACAACCATGACCCTCTCACTCACTACTGATCATCAATAAAACAGGGGCAAGCATTGATGA
CTTTATACAGTCTGTGGAGCACCAGAACATAGCTTTAGAAGTGGATGCATTTGGAAGTAAAATGGCACA
GATGACCCATCTTATAATGGAGCCATCACAGTGTGTTGTAATGAAAAGAATTACAGCTTTTCGTTAGCAT
GCAATGCCAAAAGATTGAATTGCTTCCCAGTTCTTATGGACATTGTTAGTAATGGGCTACTTGAATGGT
TAAACCATCAGTACATATCCGAAGTAAAAGAAGTACATTTTGGAGAATGGACAGGACAATCCAATCGGA
TTCTGGCATATATCATGTTCTGGCTGGTTTTAACATCGAGTTGCCACCTTACATTGCCATGAGCAGCA
TCGATGATTATAAGAACAGAGCTCGGTCCCAGCTACGGATTTCCGGACTCTCCCCTTCTGCTTACTGGT
TGGGCAGGCGCTGGTGGATGTTCCCTGTACTTCTTGGTCTTCGTTTTTATATTTAATGAGCTACATT
TCAAACCTCGAAGACATGCTACTTACAATAATTCATATTATTCAAATCCCATGTGCTGTTGGTTATTCCT
TTCCCTCATCTTCATGACATACGTGATTTCTTCTATCTTTCGCAAGGGGAGAAAAATAGTGGCATTG
GTCATTTTGTCTATGTTGCTACTGTATTCTCTGTGGCTGGATTTGCGTTCAGTATCTTCGAAAAGTAT
TTCCATTTATCTTCACTTTTTTAATACCACCTGCCACAATGATTGGCTGTTTGTCTTCTTCTCATC
TTCTCTTTTCTTCTCTTTTTCTGAAGAACGAATGGATGTACAGCCATTTCTGGTATTCTTAATTCCTTT
CCTTCATTTTATCATTTTTCTTTTTACTCTTCGATGTCTGGAATGGAAGTTTGGAAAAGAAATCAATGAGA
AAGGATCCTTTCTTTAGAATTTCTCCAAGAAGTAGTGATGTGTGTAATAAACCAGAAACAGAAAGGAG
AGGATGAAGATGTTGAGTGGAAAGAGTGAGAACAGCAAATGCCTTGAATTCTACTAATTTTATGAGAA
GCCAGTCATCATTGCCAGCTGTCTACGCAAGGAGTATGCAGGGAAGAGGAAAGGCTGTTTTTCCAAGAGG
AAGAATAAGATAGCCACGAGAAATGTCTCCTTCTGTGTTAGAAAAGGTGAAGTTTAGGATTATTAGGAC
ACAATGGAGCTGGTAAAAGCACATCCATTAAGGTGATAACTGGAGACACAAAACCAACTGCTGGACAAGT
GCTACTGAAAGGGAGCGGTGGAGGGGATGCCCTGGAGTTCCTGGGGTACTGCCCTCAGGAGAACCGCTG
TGGCCCAACCTGACAGTGAAGCAGCACCTGGAGGTGTACGCCCGCTGAAAGGGCTGAGGAAAGGGGATG
CTGAGGTTGCCATCACACGGTATGTTGATGCGCTCAAGCTGCAGGACCAGCTGAAGTCTCCCCTGAAGAC
CTTGTGAGAGGGAATAAAGAGAAAGCTGTGCTTTGTCTGAGCATACTGGGGAACCCGTCAGTGGTGGCT
CTGGATGAGCCGTCGACCGGATGGACCCCGAGGGGAGCAGCAAATGTGGCAGGCCATCCGGGCCACCT
TTAGAAACACGGAAGGGGTGCCCTCCTAACCCCACTACATGGCAGAGGCTGAGGCCGTGTGTGACCG
AGTGGCCATCATGGTATCTGGGAGTTGAGATGTATCGTTCCATCCAACACCTGAAAAGCAAATTTGGC
AAAGATTACCTGCTGGAGATGAAGGTGAAGAACCTGGCACAAGTGGAGCCCTCCATGCAGAGATCCTGA
GGCTTTTCCCCAGGCTGCTCGGCAGGAAAGTACTCCTCTGATGGTTTATAAGTTGCCAGTGAAGA
TGTGCAACCTTTAGCCCAAGCTTTCTTCAAATTAGAGAAGGTAAACAGAGCTTTGACCTAGAGGAGTAC
AGCCTCTCACAGTCTACCTGGAGCAGTTTTCTGGAGCTCTCAAGGAGCAGGAGCTGGGTGATTTTG
AGGAGGATTTTATCCCTCAGTGAAGTGAAGCTCCTCCCCAGGAAGAGCCTTAA

5' Read Nucleotide Sequence: >OriGene 5' read for NM_007168 unedited
 NGTGCANAANNNGNAAACGATCATATAGGGCGGCCGGAATTTCGCACGAGGTTAAAGCAAA
 TTCTAGATACTGGTAGAGACCGGAGAAAATATGAATAACTTTCTTCTAAACAAGGAGCTC
 AGTGGATAAACCATACCTCTAGATTCCCTTGCTTCCATTTTCCCAGAAACAAGATGAGGAC
 GAGAAAGATCAGTGTGTGCAACAACTTGGGCCTTATTATGCAAGAAGTTTCTTAAAAA
 ATGGAGAATGAAAAGAGAGTCCCTAATGGAATGGCTGAATTCATTGCTCCTACTACTTTG
 TTTGTATATATATCCTCATAGTCATCAAGTAAATGATTTTTCTCACTGCTTACCATGGA
 CCTGGGACGGGTAGATACATTTAATGAATCCAGATTTTCTGTTGTATACACACCTGTCAC
 CAACACGACCCAACAGATAATGAATAAAGTAGCCTCTACTCCCTTCTGGCAGGTAAAGA
 GGTCTTGGGACTGCCAGATGAGGAAAGTATTAAGAATTCACAGCAAATTATCCTGAAGA
 AATAGTAAGAGTCACCTTTACTAATACATACTCATATCATTGAAAGTTCTTGCTAGGACA
 TGGAAATGCCAGCAAAGAAGGAGCACAAGGACCATACAGCTCATTGTTATGAAACAAATGA
 AGATGTTTACTGTGAAGTTTCAGTATTTTGAAGGAAGGTTTTGTGGCTCTTCAAGCTGC
 CATTAATGCTGCTATTATAGAAATCCAACANATCACTCAGTGATGNNAGATCTGTATGTC
 GTTACTGGAAAAATATGAAGATGCTTCCCTTCAATGGTCATCACGAGTATAACTGGATTGA
 CCCTTTTTCTGCATATTTCAATTCCTCATCCTTACCANGCCACCGTATGGCCCAGAAG
 AGGAAAGGTGAAGCCTTGAGN

3' Read Nucleotide Sequence: >OriGene 3' read for NM_007168 unedited
 CCTTGGGACCTAGGCTCGCNGTCGGATGANCGATATAAACTTTTTTTTTTTTTTTTTTTT
 TTTCTTTTCTATATATATGTTATTAATTTAACATTTTCTACCTACTCAGCCATGTGAGCT
 GTTGCTACATTTGGGAACCTTCTGAAACCAGGGGACAAATATCCACAAAAGATCATTAC
 AATGTAACATCACTAAAGTCTAAATTTAAAAGTCCAGTAAAAATGGCCACAGTTGGCT
 TACAGAAATAAAAAAGTACAATATATTTGAAATAGCAGGTTTTTGTTCCTTTTATGC
 CTACATAAGGGGGCCCCCTGGGGATATGCTATCAACGCTTTTGTATCCCCCCCCCATGAC
 CCACGCCATTTACCCTCCTTTACGAATAAAACGCACCCTCAACTCTATCCCAAACCTACG
 CCTCGTCAAATTGTTAGGACCGGCCCTTACAAAGGGCCCCCACCCAGAAAGCCGC
 CCCGACTGTGCCCCCTCCGATACAACACCGGTCGCGCGGCGACCTCCATCCCCCAGG
 AACCCCCCTCCCCCTCCCGCCCCCGCCTCCCCCGCGCCGGGCTGGCCCTCCCCCG
 GTCGCTCCCCCGCGCCCCCCCCCTCCCCCCCCCTTTGGTCCCCCACCACGGCCC
 CCGCTCCTGTACCCCCCTAACCCGCCCCGGGCTCTCCCCCACACCCCCCTTCCA
 GCCCTCCGCCACCCCCCGCCCCCGCTTTTTCCCCCGCCCCCTCCTCCTCCGCC
 CCCACTTACCAGCCCCCGCCCCCTCCCCCGCCCCCGCCCCGCGACCCCTCCGCCGCGG
 CCCCCCGCACACCTACCCGCTCCTTGTCTTACCGCCCGCCCCGCGAGTCCACCC
 CGCCCCCTTGCCAGACCGTGTACACCCGCCCCGCGCCCCGCTTCCCCGAGTACCACCC
 CGCACTCTACCCCTCTGCCACGCTCGCAGCACCCACACTGCACCCCCACCAAG

Restriction Sites: NotI-NotI
ACCN: NM_007168
Insert Size: 5000 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](#)

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_007168.2](#), [NP_009099.1](#)

RefSeq Size: 5736 bp

RefSeq ORF: 4746 bp

Locus ID: 10351

UniProt ID: [O94911](#)

Cytogenetics: 17q24.2

Domains: ABC_tran, AAA

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: ABC transporters

Gene Summary:

The membrane-associated 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 intracellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the ABC1 subfamily. Members of the ABC1 subfamily comprise the only major ABC subfamily found exclusively in multicellular eukaryotes. The encoded protein may regulate lipid metabolism and be involved in the formation and maintenance of myelin. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]

Transcript Variant: This variant (2) differs in the 5' UTR and lacks an in-frame exon in the central coding region, compared to variant 1. The encoded isoform (2) is shorter, compared to isoform 1.