

Product datasheet for **SC318294**

ABCB5 (NM_178559) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ABCB5 (NM_178559) Human Untagged Clone
Tag:	Tag Free
Symbol:	ABCB5
Synonyms:	ABCB5alpha; ABCB5beta; EST422562
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_178559, the custom clone sequence may differ by one or more nucleotides

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ATGGTGGATGAGAATGACATCAGAGCTTTAAATGTGCGGCATTATCGAGACCATATTGGA
GTGGTTAGTCAAGAGCCTGTTTTGTTCCGGGACCACCATCAGTAACAATATCAAGTATGGA
CGAGATGATGTGACTGATGAAGAGATGGAGAGAGCAGCAAGGGAAGCAAATGCGTATGAT
TTTATCATGGAGTTTCCTAATAAATTTAATACATTGGTAGGGGAAAAAGGAGCTCAAATG
AGTGGAGGGCAGAAACAGAGGATCGCAATTGCTCGTGCCTTAGTTCGAAACCCCAAGATT
CTGATTTTAGATGAGGCTACGTCTGCCCTGGATTAGAAAAGCAAGTCAGCTGTTCAAGCT
GCACTGGAGAAGCGAGCAAAGGTCGGACTACAATCGTGGTAGCACACCGACTTTCTACT
ATTCGAAGTGCAGATTTGATTGTGACCCTAAAGGATGGAATGCTGGCGGAGAAAGGAGCA
CATGCTGAACTAATGGCAAAACGAGGTCTATATTCACTTGTGATGTCACAGGATATT
AAAAAAGCTGATGAACAGATGGAGTCAATGACATATTCTACTGAAAGAAAGACCAACTCA
CTTCTCTGCACTCTGTGAAGAGCATCAAGTCAGACTTCATTGACAAGGCTGAGGAATCC
ACCCAATCTAAAGAGATAAGTCTTCTGAAGTCTCTCTATTAATAAATTTAAAGTAAAC
AAGCCTGAATGGCCTTTTGTGGTTCTGGGGACATTGGCTTCTGTTCTAAATGGAAGTGT
CATCCAGTATTTCCATCATCTTTGCAAAAATTAACCATGTTTGGAATAATGATAAA
ACCACATTAAGCATGATGCAGAAATTTATCCATGATATTCGTCATTTTGGGTGTTATT
TGCTTTGTGAGTATTTTCATGCAGGGATTATTTACGGCAGAGCAGGGGAAATTTAAGC
ATGAGATTAAGACACTTGGCCTTCAAAGCCATGTTATATCAGGATATTGCCTGGTTTGT
GAAAAGGAAAACAGCACAGGAGGCTTGACAACAATATTAGCCATAGATATAGCACAAT
CAAGGAGCAACAGGTTCCAGGATTGGCGTCTTAACACAAAATGCAACTACATGGGACTT
TCAGTTATCATTTCCCTTATATATGGATGGGAGATGACATTCCTGATTCTGAGTATTGCT
CCAGTACTTCCCTGACAGGAATGATTGAAACCGCAGCAATGACTGGATTTGCCAACAAA
GATAAGCAAGAACCTAAGCATGCTGAAAAGATAGCAACTGAAGCTTTGGAGAATATACGT
ACTATAGTGTCATTAACAAGGAAAAAGCCTTCGAGCAAATGTATGAAGAGATGCTTCAG
ACTCAACACAGAAATACCTCGAAGAAAAGCACAGATTATTGGAAGCTGTTATGCATTGAGC
CATGCCTTTATATATTTTGCCTATGCGGCAGGGTTTCGATTTGGAGCCTATTTAATTCAA
GCTGGACGAATGACCCAGAGGGCATGTTATAGTTTTTACTGCAATTGCATATGGAGCT
ATGGCCATCGGAGAAACGCTCGTTTTGGCTCCTGAATATTCCAAAGCCAAATCGGGGCT
GCGCATCTGTTTGCCTTGTGAAAAGAAACCAATATAGACAGCCGAGTCAAGAAGGG
AAAAAGCCAGACACATGTGAAGGAATTTAGAGTTTCGAGAAGTCTCTTTCTTCTATCCA
TGTGCGCCAGATGTTTTATCCTCCGTGGCTTATCCCTCAGTATTGAGCGAGGAAAGACA
GTAGCATTGTGGGGAGCAGCGGCTGTGGGAAAAGCACTTCTGTTCAACTTCTGCAGAGA
CTTTATGACCCCGTGCAAGGACAAGTGCTGTTTGTGATGGTGGATGCAAAAAGAAATGAAT
GTACAGTGGTCCGTTCCCAATAGCAATCGTTCCTCAAGAGCCTGTGCTCTTCAACTGC
AGCATTGCTGAGAACATCGCCTATGGTGACAACAGCCGTGTGGTGCCATTAGATGAGATC
AAAGAAGCCGCAAATGCAGCAAATATCCATTTCTTTTATTGAAGGTCTCCCTGAGAAATAC
AACACACAAGTTGACTGAAAGGAGCACAGCTTTCTGGCGGCCAGAAAACAAGACTAGCT
ATTGCAAGGGCTCTTCTCAAAAACCCAAAATTTATTGTTGGATGAGGCCACTTCAGCC
CTCGATAATGACAGTGAGAAGGTGGTTTCAGCATGCCCTTGATAAAGCCAGGACGGGAAGG
ACATGCCTAGTGGTCACTCACAGGCTCTCTGCAATTCAGAACGCAGATTTGATAGTGGTT
CTGCACAATGAAAAGATAAAGGAACAAGGAATCATCAAGAGCTCCTGAGAAATCGAGAC
ATATATTTAAGTTAGTGAATGCACAGTCAGTGCAG
    
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Restriction Sites: Please inquire
ACCN: NM_178559
Insert Size: 4375 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 may be unstable or toxic at high copy number in common E. coli strain. We recommend using a lower copy number E. coli strain, such as CopyCutter strain (<http://www.epibio.com/item.asp?ID=435>) for transformation and plasmid preparation. Please be aware that the DNA yield could be low. Additional aliquots of this clone can be ordered from OriGene.

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_178559.4](#), [NP_848654.3](#)

RefSeq Size: 4375 bp

RefSeq ORF: 2439 bp

Locus ID: 340273

UniProt ID: [Q2M3G0](#)

Cytogenetics: 7p21.1

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: ABC transporters

Gene Summary:

ABCB5 belongs to the ATP-binding cassette (ABC) transporter superfamily of integral membrane proteins. These proteins participate in ATP-dependent transmembrane transport of structurally diverse molecules ranging from small ions, sugars, and peptides to more complex organic molecules (Chen et al., 2005 [PubMed 15760339]).[supplied by OMIM, Mar 2008]

Transcript Variant: This variant (2) differs in the 5' UTR and has multiple coding region differences, compared to variant 1. These differences cause translation initiation at a downstream AUG and result in an isoform (2) with a shorter N-terminus, compared to variant 1. This variant (2) is the mRNA isoform beta as described in PMID 15760339.