

Product datasheet for **SC300054**

ABCA4 (NM_000350) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ABCA4 (NM_000350) Human Untagged Clone
Tag:	Tag Free
Symbol:	ABCA4
Synonyms:	ABC10; ABCR; ARMD2; CORD3; FFM; RMP; RP19; STGD; STGD1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_000350 edited
 ATGGGCTTCGTGAGACAGATACAGCTTTTGCTCTGGAAGAAGTGGACCCTGCGGAAAAGG
 CAAAAGATTCGCTTTGTGGTGGAACTCGTGTGGCCTTTATCTTTATTTCTGGTCTTGATC
 TGGTTAAGGAATGCCAACCCGCTCTACAGCCATCATGAATGCCATTTCCCAACAAGGCG
 ATGCCCTCAGCAGGAATGCTGCCGTGGCTCCAGGGATCTTCTGCAATGTGAACAATCCC
 TGTTTTCAAAGCCCCACCCAGGAGAATCTCCTGGAATTGTGCAAACTATAACAACCTCC
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 TCACCAAGAAATCAAGAGTTTATCCATCGGCCGAGTATGCAGGACTTGCTGTGGGTGACC
 AGGCCCTCATGCAGAATGGTGGTCCAGAGACCTTTACAAAGCTGATGGGCATCCTGTCT
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GTCCTGGATAAGTTTGAAGCTACAATGATGAACTCAGCTCACCCAACGTGCCCTCTCT
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 AGCTCTCTACCACCCACGTGAAGTATAAGATCCGAATGGACATAGACGTGGTGGAGAAA
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 AGGCACTACAACATGCTCCAGTTCAGGTCCTCCTCCTCCTCCCTGGCGAGGATCTCCAG
 CTCCTCCTCTCCACAAGGACAGCCTGCTCATCGAGGAGTACTCAGTCACACAGACCACA
 CTGGACCAGGTGTTTGTAAATTTGCTAAACAGCAGACTGAAAGTCATGACCTCCCTCTG
 CACCCTCGAGCTGCTGGAGCCAGTCGACAAGCCAGGACTGA

Restriction Sites:

Please inquire

ACCN:

NM_000350

Insert Size:

6822 bp

OTI Disclaimer:

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).

OTI Annotation:

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.

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:	<ol style="list-style-type: none">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_000350.1 , NP_000341.1
RefSeq Size:	7318 bp
RefSeq ORF:	6822 bp
Locus ID:	24
UniProt ID:	P78363
Cytogenetics:	1p22.1
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	ABC transporters
Gene Summary:	<p>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. This protein is a retina-specific ABC transporter with N-retinylidene-PE as a substrate. It is expressed exclusively in retina photoreceptor cells, and the gene product mediates transport of an essential molecule, all-trans-retinal aldehyde (atRAL), across the photoreceptor cell membrane. Mutations in this gene are found in patients diagnosed with Stargardt disease, a form of juvenile-onset macular degeneration. Mutations in this gene are also associated with retinitis pigmentosa-19, cone-rod dystrophy type 3, early-onset severe retinal dystrophy, fundus flavimaculatus, and macular degeneration age-related 2. [provided by RefSeq, Sep 2019]</p>