

Product datasheet for **RG201291**

ABCD4 (NM_005050) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ABCD4 (NM_005050) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ABCD4
Synonyms:	ABC41; EST352188; MAHCJ; P70R; P79R; PMP69; PXMP1L
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>RG201291 representing NM_005050
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGGATCGCC

ATGGCGGTGCGGGGCCCGGCCGGAGCTGGCGCCAGGCCAGGTTAGATCTGCAATTTCTCCAGCGGT
TCCTGCAGATACTGAAGTTTTGTTTCTTCTGGTTCATCAGGAAATGCCTTGATGTTTCTGACCTTTT
GTGCCTGACCCTACTGGAGCAATTTGTGATCTACCAGGTTGGCCTGATCCCCAGTCAGTACTATGGGGT
CTGGGAAACAAAGACTTGAAGGGTTAAGACTCTGACATTCCTGGCTGTCATGCTCATTGTTCTGAACT
CCACGCTGAAGAGCTTTGATCAGTTACCTGCAACCTGCTGTATGTGAGCTGGAGGAAGGACCTCACTGA
GCACCTTACCAGCTCTACTTCCGGGGCGTGCCTACTACACCCTCAACGTGCTGCGGGATGACATCGAT
AACCCGGACAGCGCATCAGCCAGGACGTGGAGCGATTCTGCCGGCAGCTCAGCAGCATGCCAGCAAGC
TCATCATCTCCCGTTACCCCTCGTCTACTACACTTACCAGTCTTCAAAGCACAGGCTGGCTCGGGCC
TGTGAGCATCTCGGGTATTTATCCTGGGACCGTGGTGAACAAACTTTGATGGGCCCATTTGTGATG
AAGCTGGTGCATCAGGAGAAGCTGGAGGGAGATTTTAGGTTCAAGCACATGCAGATTCGGGTGAATGCGG
AGCCTGTGCTTTCTACAGAGCTGGGCATGTGGAGCACATGAGGACAGACCCGAGGCTGCAGAGACTCCT
TCAGACCCAGAGGGAGCTGATGTCCAAGGAGCTTGGCTGTACATCGGCATCAACACCTTTGACTATCTG
GGCAGCATCCTGAGTTACGTTGTGATCGCAATCCCCATTTTACGGGGTCTATGGAGACCTGAGTCCCA
CAGAGCTTAGCACCTGGTCCAGCAAGATGCCTTTGTGTCATCTACCTCATCAGCTGCTTACCAGCT
AATCGACTGTCCACGACGCTCTCAGATGTGGCTGGTACACGACAGAAATGGGACGCTTCCGGAGACG
CTTCTGGACATGTCCTGAAGTACAGGACTGCGAGATCCTGGGCGAGAGCAAGTGGGGCTTGGACACAC
CCCCAGGTTGGCAGCGCAGCCAGCAGACAGCATTTCTCCTTGAGCGGGTCTCCATCTCTGCCCC
CTCCTCTGACAAACCCCTAATCAAGGATCTGAGCCTAAAGATCTCCGAGGGACAGAGCCTGCTCATCACA
GGCAACACGCGGCACTGGCAAGACCTCCTTGTCCGGTCTGGGTGGCCTCTGGACGAGTACACGGGCT
CAGTGCAGATGCTGACGGACTTTGGGCCCATGGGGTGTATTCTGCCACAAAAGCCATTCTTCACTGA
CGGGACCCTTCCGGGAGCAGGTGATATATCCCCTGAAGGAGGCTTACCCCGACTCAGGTTCTGCCGATGAT
GAGAGGATCTTGAGGTTCTTGAATTGGCAGGCTGTCCAACCTGGTGGCAAGGACAGAGGGCTGGACC
AGCAGGTGGACTGGAAGTGGTATGATGTTCTGTCCCGGGGAGATGCAACGGCTCTCCTTTGCCGACT
CTTCTACCTGCAGCCGAAGTACGAGTGTGATGAAGCCACCAGTGCCTGACAGAGGAAGTGGAGAGC
GAGCTCTATCGCATCGGCCAGCAGCTGGGGATGACGTTTATCAGTGTGGGACATCGCAGAGCCTTGAGA
AGTTTCATCTCTGGTCTGAAACTCTGTGGAGGAGGAAGATGGGAGCTGATGAGAAATCAAGTGGAA

ACGCGTACGCGGCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG201291 representing NM_005050
Red=Cloning site Green=Tags(s)

MAVAGPAPGAGARPRDLQFLQRFLQILKVLFPSSQNALMFLTLLCLLLEQFVYIYQVGLIPSQYYGV
LGNKDLEGFKTLTFLAVMLIVLNSTLKSFDQFTCNLLYVSWRKDLTEHLHRLYFRGRAYYTLNVLRDDID
NPDQRISQDVERFCRQLSSMASKLIISPFVLVYYTYQCFQSTGWLGPVSIIFYGILGTVVNKTLMGPIMV
KL VHQEKLEGDFRKHMQIRVNAEPAFYRAGHVEHMRDRRLQRLQTQRELMSKELWL YIGINTFDYL
GSILSYVVIAIPIFSGVYDLSPTLSTLVSKNAFVCIYLISCFTQLIDLSTLSDVAGYTHRIGQLRET
LLDMSLSQDCEILGESKWGLDTPPGWPAEPADTAFLLRVVISAPSSDKPLIKDLSLKI SEGQSLIT
GNTGTGKTSLLRVLGGLWTSTRGSVQMLTDFGPHGVLFLPQKPFPTDGLREQVIYPLKEVYVYDSSGADD
ERILRFLLELAGLSNLVARTEGLDQVDDWYDVLSPGEMQRLSFARLFYLPKYAVLDEATSALTEEVES
ELYRIGQQQLGTMFISVGHRSLEKFHSLVLKLCGGGRWELMIRKVE

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_005050

ORF Size: 1818 bp

OTI Disclaimer: 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 was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_005050.2](#), [NP_005041.1](#)

RefSeq Size: 3149 bp

RefSeq ORF: 1821 bp

Locus ID: 5826

UniProt ID: [O14678](#)

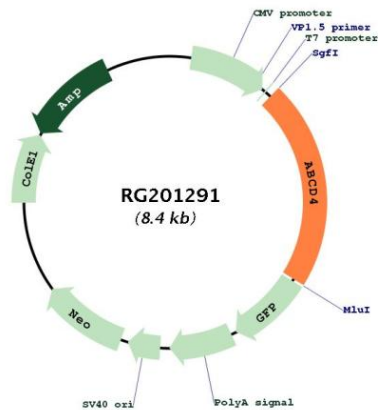
Cytogenetics: 14q24.3

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 ALD subfamily, which is involved in peroxisomal import of fatty acids and/or fatty acyl-CoAs in the organelle. All known peroxisomal ABC transporters are half transporters which require a partner half transporter molecule to form a functional homodimeric or heterodimeric transporter. The function of this peroxisomal membrane protein is unknown. However, it is speculated that it may function as a heterodimer for another peroxisomal ABC transporter and, therefore, may modify the adrenoleukodystrophy phenotype. It may also play a role in the process of peroxisome biogenesis. Alternative splicing results in several protein-coding and non-protein-coding variants. [provided by RefSeq, Jul 2017]

Product images:



Circular map for RG201291