OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for KN206885

ABCD1 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 GFP-puro donor, 1 scramble control

Donor DNA: GFP-puro

Symbol: ABCD1

Locus ID: 215

Components: **KN206885G1**, ABCD1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTGGGCTCCATAGGCCGCGA
KN206885G2, ABCD1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGGGAACACGCTGAAGCGCA
KN206885D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.
Homologous arm and GFP-puro sequences:
pUC vector backbone in gray; Left arm sequence in blue; GFP-puro in green; Right arm in violet

```
GATCGTTGGG AACCGGAGCT GAATGAAGCC ATACCAAACG ACGAGCGTGA CACCACGATG CCTGTAGCAA
TGGCAACAAC GTTGCGCAAA CTATTAACTG GCGAACTACT TACTCTAGCT TCCCGGCAAC AATTAATAGA
CTGGATGGAG GCGGATAAAG TTGCAGGACC ACTTCTGCGC TCGGCCCTTC CGGCTGGCTG GTTTATTGCT
GATAAATCTG GAGCCGGTGA GCGTGGTTCT CGCGGTATCA TTGCAGCACT GGGGCCAGAT GGTAAGCCCT
CCCGTATCGT AGTTATCTAC ACGACGGGGA GTCAGGCAAC TATGGATGAA CGAAATAGAC AGATCGCTGA
GATAGGTGCC TCACTGATTA AGCATTGGTA ACTGTCAGAC CAAGTTTACT CATATATACT TTAGATTGAT
TTAAAACTTC ATTTTTAATT TAAAAGGATC TAGGTGAAGA TCCTTTTTGA TAATCTCATG ACCAAAATCC
CTTAACGTGA GTTTTCGTTC CACTGAGCGT CAGACCCCGT AGAAAAGATC AAAGGATCTT CTTGAGATCC
TTTTTTTCTG CGCGTAATCT GCTGCTTGCA AACAAAAAAA CCACCGCTAC CAGCGGTGGT TTGTTTGCCG
GATCAAGAGC TACCAACTCT TTTTCCGAAG GTAACTGGCT TCAGCAGAGC GCAGATACCA AATACTGTTC
TTCTAGTGTA GCCGTAGTTA GGCCACCACT TCAAGAACTC TGTAGCACCG CCTACATACC TCGCTCTGCT
AATCCTGTTA CCAGTGGCTG CTGCCAGTGG CGATAAGTCG TGTCTTACCG GGTTGGACTC AAGACGATAG
TTACCGGATA AGGCGCAGCG GTCGGGCTGA ACGGGGGGTT CGTGCACACA GCCCAGCTTG GAGCGAACGA
CCTACACCGA ACTGAGATAC CTACAGCGTG AGCTATGAGA AAGCGCCACG CTTCCCGAAG GGAGAAAGGC
GGACAGGTAT CCGGTAAGCG GCAGGGTCGG AACAGGAGAG CGCACGAGGG AGCTTCCAGG GGGAAACGCC
TGGTATCTTT ATAGTCCTGT CGGGTTTCGC CACCTCTGAC TTGAGCGTCG ATTTTTGTGA TGCTCGTCAG
GGGGGCGGAG CCTATGGAAA AACGCCAGCA ACGCGGCCTT TTTACGGTTC CTGGCCTTTT GCTGGCCTTT
TGCTCACATG TTCTTTCCTG CGTTATCCCC TGATTCTGTG GATAACCGTA TTACCGCCTT TGAGTGAGCT
GATACCGCTC GCCGCAGCCG AACGACCGAG CGCAGCGAGT CAGTGAGCGA GGAAGCGGAA GAGCGCCCAA
TACGCAAACC GCCTCTCCCC GCGCGTTGGC CGATTCATTA ATGCAGCTGG CACGACAGGT TTCCCGACTG
GAAAGCGGGC AGTGAGCGCA ACGCAATTAA TGTGAGTTAG CTCACTCATT AGGCACCCCA GGCTTTACAC
TTTATGCTTC CGGCTCGTAT GTTGTGTGGA ATTGTGAGCG GATAACAATT TCACACAGGA AACAGCTATG
ACCATGATTA CGCCAAGCTC CTTCCTCTTC CAGCCCTTCC TCTTTCACTG ACTGACTGAC TGGAAGACAC
```


View online »

ACCTGGTGCG GGAGGGGCCC CGCCGAGGGG CGAGAACGGG AGGTGGGGGT GTGGGCGGGC CCCGCCGAGG
GGCGAGAACA GGGTGGGGCT CCCGCGCCCG GACTCCGCCC CTCGCCCCTC CTCCGCCTCC TCCCCTTCCC
CCGACTCGCC CCTGGGGAAG AGTGGGTGGG GATTCTGGGC CGGTGGAGGA GTCACTGTCG CTTCAGCCAG
GCTGCGGAGC GGACGGACGC GCCTGGTGCC CCGGGGAGGG GCGCCACCGG GGGAGGAGGA GGAGGAGAAG
GTGGAGAGGA AGAGACGCCC CCTCTGCCCG AGACCTCTCA AGGCCCTGAC CTCAGGGGCC AGGGCACTGA
CAGGACAGGA GAGCCAAGTT CCTCCACTTG GGCTGCCCGA AGAGGCCGCG ACCCTGGAGG GCCCTGAGCC
CACCGCACCA GGGGCCCCAG CACCACCCCG GGGGCCTAAA GCGACAGTCT CAGGGGCCAT CGCAAGGTTT
CCAGTTGCCT AGACAACAGG CCCAGGGTCA GAGCAACAAT CCTTCCAGCC ACCTGCCTCA ACTGCTGCCC
CAGGCACCAG CCCCAGTCCC TACGCGGCAG CCAGCCCAGG TGACACTAGC ATGGAGAGCG ACGAGAGCGG
CCTGCCCGCC ATGGAGATCG AGTGCCGCAT CACCGGCACC CTGAACGGCG TGGAGTTCGA GCTGGTGGGC
GGCGGAGAGG GCACCCCCGA GCAGGGCCGC ATGACCAACA AGATGAAGAG CACCAAAGGC GCCCTGACCT
TCAGCCCCTA CCTGCTGAGC CACGTGATGG GCTACGGCTT CTACCACTTC GGCACCTACC CCAGCGGCTA
CGAGAACCCC TTCCTGCACG CCATCAACAA CGGCGGCTAC ACCAACACCC GCATCGAGAA GTACGAGGAC
GGCGGCGTGC TGCACGTGAG CTTCAGCTAC CGCTACGAGG CCGGCCGCGT GATCGGCGAC TTCAAGGTGA
TGGGCACCGG CTTCCCCGAG GACAGCGTGA TCTTCACCGA CAAGATCATC CGCAGCAACG CCACCGTGGA
GCACCTGCAC CCCATGGGCG ATAACGATCT GGATGGCAGC TTCACCCGCA CCTTCAGCCT GCGCGACGGC
GGCTACTACA GCTCCGTGGT GGACAGCCAC ATGCACTTCA AGAGCGCCAT CCACCCCAGC ATCCTGCAGA
ACGGGGGCCC CATGTTCGCC TTCCGCCGCG TGGAGGAGGA TCACAGCAAC ACCGAGCTGG GCATCGTGGA
GTACCAGCAC GCCTTCAAGA CCCCGGATGC AGATGCCGGT GAAGAAAGAG TTTAAGAATT CCGATCATAT
TCAATAACCC TTAATATAAC TTCGTATAAT GTATGCTATA CGAAGTTATT AGGTCTGAAG AGGAGTTTAC
GTCCAGCCAA GCTTAGGATC TCGACCTCGA AATTCTACCG GGTAGGGGAG GCGCTTTTCC CAAGGCAGTC
TGGAGCATGC GCTTTAGCAG CCCCGCTGGG CACTTGGCGC TACACAAGTG GCCTCTGGCC TCGCACACAT
TCCACATCCA CCGGTAGGCG CCAACCGACT CCGTTCTTTG GTGGCCCCTT CGCGCCACCT TCTACTCCTC
CCCTAGTCAG GAAGTTCCCC CCCGCCCCGC AGCTCGCGTC GTGCAGGACG TGACAAATGG AAGTAGCACG
TCTCACTAGT CTCGTGCAGA TGGACAGCAC CGCTGAGCAA TGGAAGCGGG TAGGCCTTTG GGGCAGCGGC
CAATAGCAGC TTTGCTCCTT CGCTTTCTGG GCTCAGAGGC TGGGAAGGGG TGGGTCCGGG GGCGGGCTCA
GGGGCGGGCT CAGGGGCGGG GCGGGCGCCC GAAGGTCCTC CGGAGGCCCG GCATTCTGCA CGCTTCAAAA
GCGCACGTCT GCCGCGCTGT TCTCCTCTTC CTCATCTCCG GGCCTTTCGA CCTGCATCCA TCTAGATCTC
GAGCAGCTGA AGCTTACCAT GACCGAGTAC AAGCCCACGG TGCGCCTCGC CACCCGCGAC GACGTCCCCA
GGGCCGTACG CACCCTCGCC GCCGCGTTCG CCGACTACCC CGCCACGCGC CACACCGTCG ATCCGGACCG
CCACATCGAG CGGGTCACCG AGCTGCAAGA ACTCTTCCTC ACGCGCGTCG GGCTCGACAT CGGCAAGGTG
TGGGTCGCGG ACGACGGCGC CGCGGTGGCG GTCTGGACCA CGCCGGAGAG CGTCGAAGCG GGGGCGGTGT
TCGCCGAGAT CGGCCCGCGC ATGGCCGAGT TGAGCGGTTC CCGGCTGGCC GCGCAGCAAC AGATGGAAGG
CCTCCTGGCG CCGCACCGGC CCAAGGAGCC CGCGTGGTTC CTGGCCACCG TCGGCGTCTC GCCCGACCAC
CAGGGCAAGG GTCTGGGCAG CGCCGTCGTG CTCCCCGGAG TGGAGGCGGC CGAGCGCGCC GGGGTGCCCG
CCTTCCTGGA GACCTCCGCG CCCCACAACC TCCCCTTCTA CGAGCGGCTC GGCTTCACCG TCACCGCCGA
CGTCGAGGTG CCCGAAGGAC CGCGCACCTG GTGCATGACC CGCAAGCCCG GTGCCTGACG CCCGCCCCAC
GACCCGCAGC GCCCGACCGA AAGGAGCGCA CGACCCCATG CATCGATGAT ATCAGATCCC CGGGATGCAG
AAATTGATGA TCTATTAAAC AATAAAGATG TCCACTAAAA TGGAAGTTTT TCCTGTCATA CTTTGTTAAG
AAGGGTGAGA ACAGAGTACC TACATTTTGA ATGGAAGGAT TGGAGCTACG GGGGTGGGGG TGGGGTGGGA
TTAGATAAAT GCCTGCTCTT TACTGAAGGC TCTTTACTAT TGCTTTATGA TAATGTTTCA TAGTTGGATA
TCATAATTTA AACAAGCAAA ACCAAATTAA GGGCCAGCTC ATTCCTCCCA CTCATGATCT ATAGATCTAT
AGATCTCTCG TGGGATCATT GTTTTTCTCT TGATTCCCAC TTTGTGGTTC TAAGTACTGT GGTTTCCAAA
TGTGTCAGTT TCATAGCCTG AAGAACGAGA TCAGCAGCCT CTGTTCCACA TACACTTCAT TCTCAGTATT
GTTTTGCCAA GTTCTAATTC CATCAGAAGC TGGTCGAGAT CCGGAACCCT TAATATAACT TCGTATAATG
TATGCTATAC GAAGTTATTA GGTCCCTCGA AGAGGTTCAC TAGGCGCGCC AGCCCACGCA GGAGGCCTCC
GGGGTCGCGG CGGCCAAAGC TGGCATGAAC CGGGTATTCC TGCAGCGGCT CCTGTGGCTC CTGCGGCTGC
TGTTCCCCCG GGTCCTGTGC CGGGAGACGG GGCTGCTGGC CCTGCACTCG GCCGCCTTGG TGAGCCGCAC
CTTCCTGTCG GTGTATGTGG CCCGCCTGGA CGGAAGGCTG GCCCGCTGCA TCGTCCGCAA GGACCCGCGG
GCTTTTGGCT GGCAGCTGCT GCAGTGGCTC CTCATCGCCC TCCCTGCTAC CTTCGTCAAC AGTGCCATCC
GTTACCTGGA GGGCCAACTG GCCCTGTCGT TCCGCAGCCG TCTGGTGGCC CACGCCTACC GCCTCTACTT
CTCCCAGCAG ACCTACTACC GGGTCAGCAA CATGGACGGG CGGCTTCGCA ACCCTGACCA GTCTCTGACG

GAGGACGTGG TGGCCTTTGC GGCCTCTGTG GCCCACCTCT ACTCCAACCT GACCAAGCCA CTCCTGGACG
TGGCTGTGAC TTCCTACACC CTGCTTCGGG CGGCCCGCTC CCGTGGAGCC GGCACAGCCT GGCCCTCGGC
CATCGCCGGC CTCGTGGTGT ACGACAGTCT TCACTGACTG ACTGACTGGA AAGTCCTCTC CACTGACTGT
AGCCTCCAAT TCACTGGCCG TCGTTTTACA ACGTCGTGAC TGGGAAAACC CTGGCGTTAC CCAACTTAAT
CGCCTTGCAG CACATCCCCC TTTCGCCAGC TGGCGTAATA GCGAAGAGGC CCGCACCGAT CGCCCTTCCC
AACAGTTGCG CAGCCTGAAT GGCGAATGGC GCCTGATGCG GTATTTTCTC CTTACGCATC TGTGCGGTAT
TTCACACCGC ATACGTCAAA GCAACCATAG TACGCGCCCT GTAGCGGCGC ATTAAGCGCG GCGGGTGTGG
TGGTTACGCG CAGCGTGACC GCTACACTTG CCAGCGCCCT AGCGCCCGCT CCTTTCGCTT TCTTCCCTTC
CTTTCTCGCC ACGTTCGCCG GCTTTCCCCG TCAAGCTCTA AATCGGGGGC TCCCTTTAGG GTTCCGATTT
AGTGCTTTAC GGCACCTCGA CCCCAAAAAA CTTGATTTGG GTGATGGTTC ACGTAGTGGG CCATCGCCCT
GATAGACGGT TTTTCGCCCT TTGACGTTGG AGTCCACGTT CTTTAATAGT GGACTCTTGT TCCAAACTGG
AACAACACTC AACCCTATCT CGGGCTATTC TTTTGATTTA TAAGGGATTT TGCCGATTTC GGCCTATTGG
TTAAAAAATG AGCTGATTTA ACAAAAATTT AACGCGAATT TTAACAAAAT ATTAACGTTT ACAATTTTAT
GGTGCACTCT CAGTACAATC TGCTCTGATG CCGCATAGTT AAGCCAGCCC CGACACCCGC CAACACCCGC
TGACGCGCCC TGACGGGCTT GTCTGCTCCC GGCATCCGCT TACAGACAAG CTGTGACCGT CAACGGGAGC
TGCATGTGTC AGAGGTTTTC ACCGTCATCA CCGAAACGCG CGACCCGAAA GGGCCTCGTG ATACGCCTAT
TTTTATAGGT TAATGTCATG ATAATAATGG TTTCTTAGAC GTCAGGTGGC ACTTTTCGGG GAAATGTGCG
CGGAACCCCT ATTTGTTTAT TTTTCTAAAT ACATTCAAAT ATGTATCCGC TCATGAGACA ATAACCCTGA
TAAATGCTTC AATAATATTG AAAAAGGAAG AGTATGAGTA TTCAACATTT CCGTGTCGCC CTTATTCCCT
TTTTTGCGGC ATTTTGCCTT CCTGTTTTTG CTCACCCAGA AACGCTGGTG AAAGTAAAAG ATGCTGAAGA
TCAGTTGGGT GCACGAGTGG GTTACATCGA ACTGGATCTC AACAGCGGTA AGATCCTTGA GAGTTTTCGC
CCCGAAGAAC GTTTTCCAAT GATGAGCACT TTTAAAGTTC TGCTATGTGG CGCGGTATTA TCCCGTATTG
ACGCCGGGCA AGAGCAACTC GGTCGCCGCA TACACTATTC TCAGAATGAC TTGGTTGAGT ACTCACCAGT
CACAGAAAAG CATCTTACGG ATGGCATGAC AGTAAGAGAA TTATGCAGTG CTGCCATAAC CATGAGTGAT
AACACTGCGG CCAACTTACT TCTGACAACG ATCGGAGGAC CGAAGGAGCT AACCGCTTTT TTGCACAACA
TGGGGGATCA TGTAACTCGC CTT

GE100003, scramble sequence in pCas-Guide vector

Disclaimer: These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

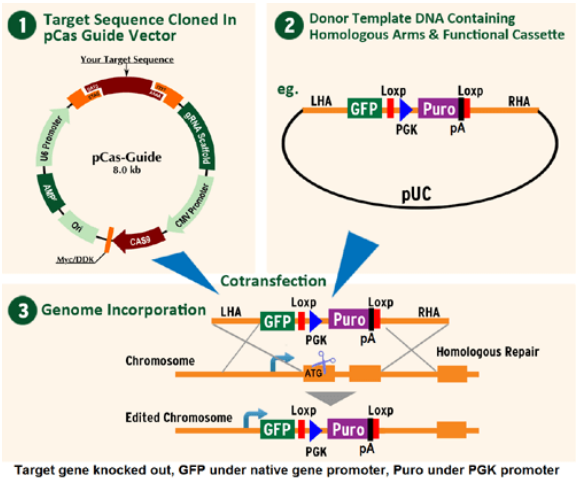
RefSeq: NM_000033

UniProt ID: P33897

Synonyms: ABC42; ALD; ALDP; AMN

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. This peroxisomal membrane protein is likely involved in the peroxisomal transport or catabolism of very long chain fatty acids. Defects in this gene have been identified as the underlying cause of adrenoleukodystrophy, an X-chromosome recessively inherited demyelinating disorder of the nervous system. [provided by RefSeq, Jul 2008]

Product images:



Target gene knocked out, GFP under native gene promoter, Puro under PGK promoter