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 RC204994

PECI (ECI2) (NM_006117) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PECI (ECI2) (NM_006117) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PECI
Synonyms:	ACBD2; dJ1013A10.3; DRS-1; DRS1; HCA88; PECI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC204994 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAATAGAACAGCAATGAGAGCCAGTCAGAAGGACTTTGAAAATTCAATGAATCAAGTGAAACTCTTGA
AAAAGGATCCAGGAAACGAAGTGAAGCTAAAACTCTACGCGCTATATAAGCAGGCCACTGAAGGACCTTG
TAACATGCCCAAACCAGGTGTATTTGACTTGATCAACAAGGCCAAATGGGACGCATGGAATGCCCTTGGC
AGCCTGCCCAAGGAAGCTGCCAGGCAGAACTATGTGGATTTGGTGTCCAGTTTGAGTCCTTCATTGGAAT
CCTCTAGTCAGGTGGAGCCTGGAACAGACAGGAAATCAACTGGGTTTGAAACTCTGGTGGTGACCTCCGA
AGATGGCATCACAAAGATCATGTTCAACCGGCCCAAAAAGAAAAATGCCATAAACACTGAGATGTATCAT
GAAATTATGCGTGCACTTAAAGCTGCCAGCAAGGATGACTCAATCATCACTGTTTTAACAGGAAATGGTG
ACTATTACAGTAGTGGGAATGATCTGACTAACTTCACTGATATTCCCCCTGGTGGAGTAGAGGAGAAAGC
TAAAAATAATGCCGTTTTACTGAGGGAATTTGTGGGCTGTTTTATAGATTTTCCTAAGCCTCTGATTGCA
GTGGTCAATGGTCCAGCTGTGGGCATCTCCGTCACCCTCCTTGGGCTATTCGATGCCGTGTATGCATCTG
ACAGGGCAACATTTCATACACCATTTAGTCACCTAGGCCAAAGTCCGGAAGGATGCTCCTCTTACACTTT
TCCGAAGATAATGAGCCCAGCCAAGGCAACAGAGATGCTTATTTTTGGAAAGAAGTTAACAGCGGGAGAG
GCATGTGCTCAAGGACTTGTTACTGAAGTTTTCCCTGATAGCACTTTTCAGAAAGAAGTCTGGACCAGGC
TGAAGGCATTTGCAAAGCTTCCCCCAAATGCCTTGAGAATTTCAAAAGAGGTAATCAGGAAAAGAGAGAG
AGAAAAACTACACGCTGTTAATGCTGAAGAATGCAATGTCCTTCAGGGAAGATGGCTATCAGATGAATGC
ACAAATGCTGTGGTGAACTTCTTATCCAGAAAATCAAAACTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC204994 protein sequence
Red=Cloning site Green=Tags(s)

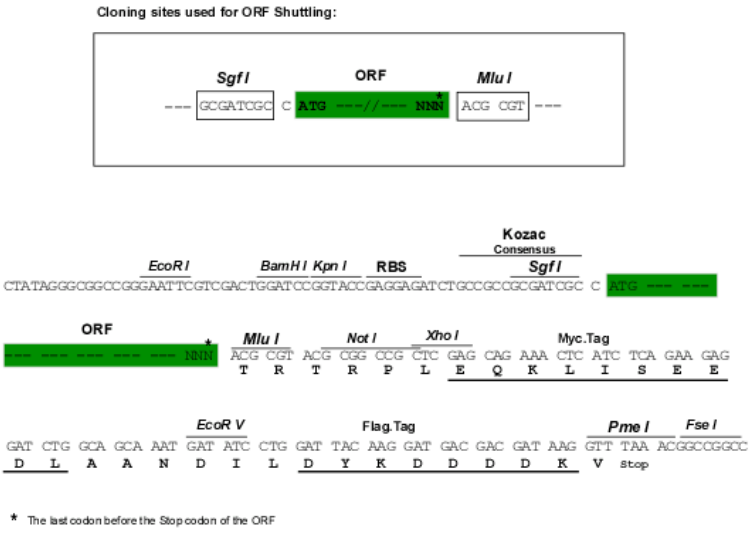
MNRTAMRASQKDFENSMNQVKLLKKDPGNEVKLKLYALYKQATEGPCNMPKPGVFDLINKAKWDAWNALG
SLPKEAARQNYVDLVSSLSPSLESSSQVEPGTDRKSTGFETLVVTSEDGITKIMFNRPKKKNAINTEMYH
EIMRALKAASKDDSIITVLTGNGDYYSSGNDLTNFTDIPPGGVEEKAKNNAVLLREFVGCFIDFPKPLIA
VVNGPAVGISVTLLGLFDAVYASDRATFHTPFSHLGQSPEGCSSYTFPKIMSPAKATEMLIFGKKLTAGE
ACAQGLVTEVFPDSTFQKEVWTRLKAFAKLPPNALRISKEVIRKRREREKLHAVNAEECNVLQGRWLSDEC
TNAVVNFLSRKSKL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6070_b06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006117

ORF Size: 1092 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_006117.2, NP_006108.2

RefSeq Size: 1410 bp

RefSeq ORF: 1095 bp

Locus ID: 10455

UniProt ID: O75521

Cytogenetics: 6p25.2

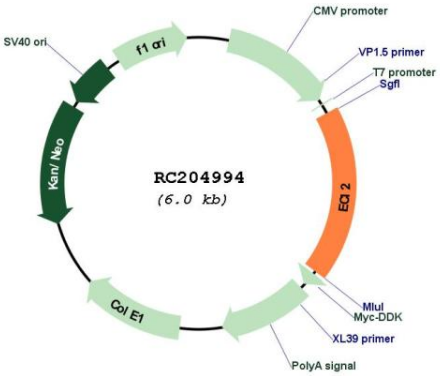
Domains: ACBP, ECH

Protein Pathways: Fatty acid metabolism

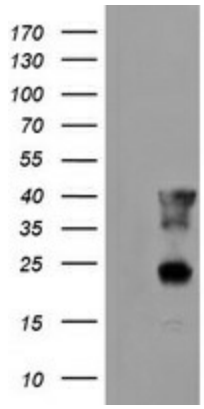
MW: 40.2 kDa

Gene Summary: This gene encodes a member of the hydratase/isomerase superfamily. The protein encoded is a key mitochondrial enzyme involved in beta-oxidation of unsaturated fatty acids. It catalyzes the transformation of 3-cis and 3-trans-enoyl-CoA esters arising during the stepwise degradation of cis-, mono-, and polyunsaturated fatty acids to the 2-trans-enoyl-CoA intermediates. Alternatively spliced transcript variants have been described. [provided by RefSeq, Aug 2011]

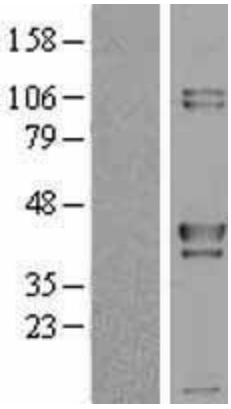
Product images:



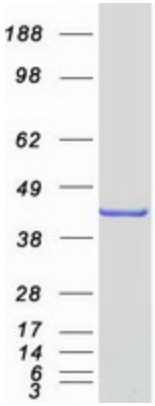
Circular map for RC204994



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PECI (Cat# RC204994, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PECI(Cat# [TA504275]). Positive lysates [LY401844] (100ug) and [LC401844] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY431874]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC228846] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ECI2 protein (Cat# [TP304994]). The protein was produced from HEK293T cells transfected with ECI2 cDNA clone (Cat# RC204994) using MegaTran 2.0 (Cat# [TT210002]).