

Product datasheet for RC205622

ECH1 (NM_001398) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ECH1 (NM_001398) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ECH1
Synonyms:	HPXEL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205622 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCGGCGGGGATAGTGGCTTCTCGCAGACTCCGCGACCTACTGACCCGGCGACTGACAGGCTCCAAC
 ACCCGGGACTCAGTATTAGCCTTCGCCTCACTGGCTCCTCTGCACAAGAGGCGGTTCCGGAGTAGCCCT
 CGGTGAAGCCCCAGACCACAGCTATGATCCCTTCGTGTGACGTCTGCGCAGAAACATGTTCTGCATGTC
 CAGCTCAACCGGCCCAACAAGAGGAATGCCATGAACAAGGTCTTCTGGAGAGAGATGGTAGAGTGCTTCA
 ACAAGATTTTCGAGAGACGCTGACTGTGGGCGGTGGTGATCTCTGGTGCAGGAAAAATGTTCACTGCAGG
 TATTGACCTGATGGACATGGCTTCGGACATCCTGCAGCCCAAAGGAGATGATGTGGCCCGGATCAGCTGG
 TACCTCCGTGACATCATCACTCGATACAGGAGACCTTCAACGTCATCGAGAGGTGCCCCAAGCCCGTGA
 TTGCTGCCGTCCATGGGGCTGCATTGGCGGAGGTGTGGACCTTGTACCGCCTGTGACATCCGGTACTG
 TGCCCAGGATGCTTTCTTCCAGGTGAAGGAGGTGGACGTGGGTTTGGCTGCCGATGTAGGAACACTGCAG
 CGCCTGCCAAGGTATCGGGAACAGAGCCTGGTCAACGAGCTGGCCTTACCGCCCGCAAGATGATGG
 CTGACGAGGCCCTGGGCAGTGGGCTGGTCAGCCGGGTGTTCCAGACAAAGAGGTATGCTGGATGCTGC
 CTTAGCGCTGGCGCCGAGATTTCCAGCAAGAGCCCCGTGGCGGTGCAGAGCACAAGGTCAACCTGCTG
 TATTCGCGGACCATTCGGTGGCCGAGAGCCTCAACTACGTGGCGTCTGGAACATGAGCATGCTGCAGA
 CCCAAGACCTCGTGAAGTCGGTCCAGGCCACGACTGAGAACAAGAACTGAAAACCGTCACCTTCTCCAA
 GCTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC205622 protein sequence
 Red=Cloning site Green=Tags(s)

MAAGIVASRRRLDLLTRRLTGSNYPGLSISLRLTGSSAQEAASGVALGEAPDHSYESLRVTSQKHVLHV
 QLNRPNKRNAMNKVFWREMECFNKISRADCRVVISGAGKMFTAGIDLMDASDILQPKGDDVARISW
 YLRDIITRYQETFNVIERC PKPVIAAVHGGCIGGGVDLVTACDIRYCAQDAFFQVKEVDVGLAADVGT LQ
 RLPKVIGNQSLVNELAFTARKMMADEALGSGLVSRVFPDKEVMLDAALALAAEISSKSPVAVQSTKVNLL
 YSRDHSVAESLNYVASWNMSMLQTQDLVKSQATTENKELKTVTF SKL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6437_b03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001398

ORF Size: 984 bp

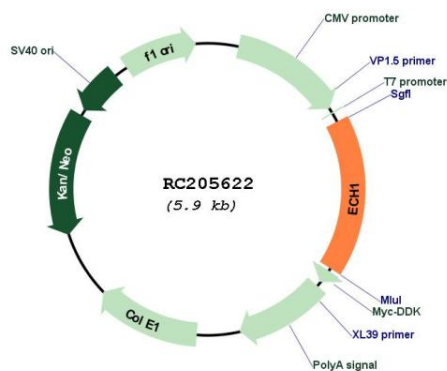
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

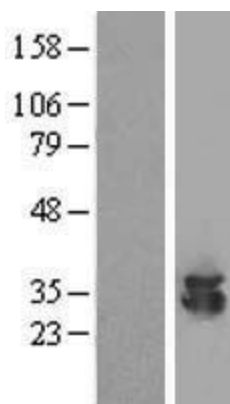
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001398.2, NP_001389.2</u>
RefSeq Size:	1276 bp
RefSeq ORF:	987 bp
Locus ID:	1891
UniProt ID:	<u>Q13011</u>
Cytogenetics:	19q13.2
Domains:	ECH
MW:	35.8 kDa
Gene Summary:	This gene encodes a member of the hydratase/isomerase superfamily. The gene product shows high sequence similarity to enoyl-coenzyme A (CoA) hydratases of several species, particularly within a conserved domain characteristic of these proteins. The encoded protein, which contains a C-terminal peroxisomal targeting sequence, localizes to the peroxisome. The rat ortholog, which localizes to the matrix of both the peroxisome and mitochondria, can isomerize 3-trans,5-cis-dienoyl-CoA to 2-trans,4-trans-dienoyl-CoA, indicating that it is a delta3,5-delta2,4-dienoyl-CoA isomerase. This enzyme functions in the auxiliary step of the fatty acid beta-oxidation pathway. Expression of the rat gene is induced by peroxisome proliferators. [provided by RefSeq, Jul 2008]

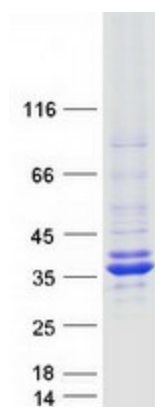
Product images:



Circular map for RC205622



Western blot validation of overexpression lysate (Cat# [LY419959]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205622 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ECH1 protein (Cat# [TP305622]). The protein was produced from HEK293T cells transfected with ECH1 cDNA clone (Cat# RC205622) using MegaTran 2.0 (Cat# [TT210002]).