

Product datasheet for **RG205622**

ECH1 (NM_001398) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ECH1 (NM_001398) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ECH1
Synonyms:	HPXEL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG205622 representing NM_001398 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGCGGGGATAGTGGCTTCTCGCAGACTCCGCGACCTACTGACCCGGCGACTGACAGGCTCCAAC
ACCCGGGACTCAGTATTAGCCTTCGCCTCACTGGCTCCTCTGCACAAGAGGCGGCTCCGGAGTAGCCCT
CGGTGAAGCCCCAGACCACAGCTATGAGTCCCTTCGTGTGACGTCTGCGCAGAAACATGTTCTGCATGTC
CAGCTCAACCGGCCCAACAAGAGGAATGCCATGAACAAGGTCTTCTGGAGAGAGATGGTAGAGTGCTTCA
ACAAGATTTTCGAGAGACGCTGACTGTGGGCGGTGGTGATCTCTGGTGCAGGAAAAATGTTCACTGCAGG
TATTGACCTGATGGACATGGCTTCGGACATCCTGCAGCCCAAAGGAGATGATGTGGCCCGGATCAGCTGG
TACCTCCGTGACATCATCACTCGATACAGGAGACCTTCAACGTCATCGAGAGGTGCCCCAAGCCCGTGA
TTGCTGCCGTCCATGGGGCTGCATTGGCGGAGGTGTGGACCTTGTACCGCCTGTGACATCCGGTACTG
TGCCCAGGATGCTTTCTCCAGGTGAAGGAGGTGGACGTGGGTTTGGCTGCCGATGTAGGAACACTGCAG
CGCCTGCCAAGGTATCGGGAACAGAGCCTGGTCAACGAGCTGGCCTTACCGCCCGCAAGATGATGG
CTGACGAGGCCCTGGGCAGTGGGCTGGTCAGCCGGGTGTTCCAGACAAAGAGGTATGCTGGATGCTGC
CTTAGCGCTGGCGCCGAGATTTCCAGCAAGAGCCCGTGGCGGTGCAGAGCACAAGGTCAACCTGCTG
TATTCGCGGACCATTCGGTGGCCGAGAGCCTCAACTACGTGGCGTCTGGAACATGAGCATGCTGCAGA
CCCAAGACCTCGTGAAGTCGGTCCAGGCCACGACTGAGAACAAGAACTGAAAACCGTCACCTTCTCCAA
GCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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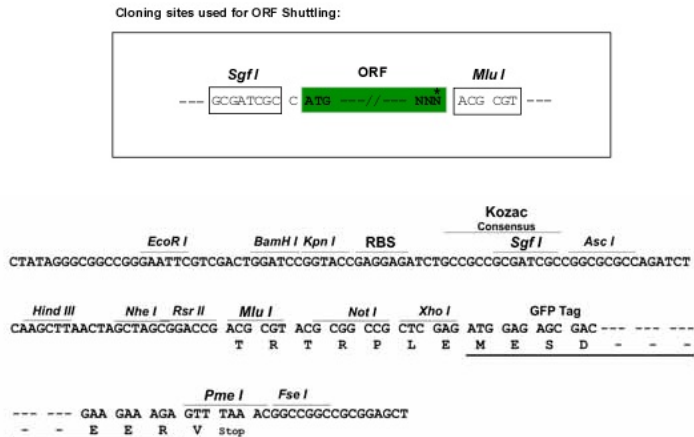
Protein Sequence: >RG205622 representing NM_001398
 Red=Cloning site Green=Tags(s)

MAAGIVASRRRLDLLTRRLTGSNYPGLSISLRLTGSSAQEAASGVALGEAPDHSYESLRVTSQKHLVHV
 QLNRPKNRNMNKFVWREMECFNKISRDAACRAVVISGAGKMFTAGIDLMDASDILQPKGDDVARISW
 YLRDIITRYQETFNVIERCPKPVIAAVHGGCIGGGVDLVTACDIRYCAQDAFFQVKEVDVGLAADVGTQ
 RLPKVIGNQSLVNELAFTARKMMADEALGSLVSRVFPDKEVMLDAALALAAEISSKSPVAVQSTKVNLL
 YSRDHSVAESLNYVASWNMSMLQTQDLVKSQATTENKELKTVTFSKL

TRTRPLE – GFP Tag – V

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: [NM_001398.2](#), [NP_001389.2](#)

RefSeq Size: 1276 bp

RefSeq ORF: 987 bp

Locus ID: 1891

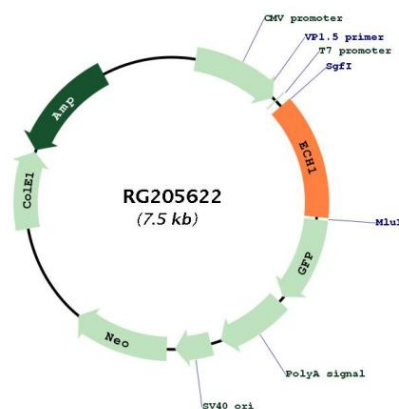
UniProt ID: [Q13011](#)

Cytogenetics: 19q13.2

Domains: ECH

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 RG205622

