

Product datasheet for **RG200369**

ECHS1 (NM_004092) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ECHS1 (NM_004092) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: ECHS1
Synonyms: ECHS1D; SCEH
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG200369 representing NM_004092
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGCCCTGCGTGTCTGCTGCTGCTGCGTCCGCGGCCGCTGAGGCCCGGTTGCTGTCCCCT
GGCGTCCCTTCGCTCGGGTGCTAACTTTGAGTACATCATCGAGAAAAAGAGGAAGAATAACACCGT
GGGGTTGATCCAACGAACCGCCCAAGGCCCTCAATGCACTTTGCGATGGCCTGATTGACGAGCTCAAC
CAGGCCCTGAAGATCTTCGAGGAGGACCCGGCCGTGGGGCCATTGTCTCACCGCGGGGATAAGGCCT
TTGCAGCTGGAGCTGATATCAAGGAAATGCAGAACCTGAGTTCCAGGACTGTTACTCCAGCAAGTTCTT
GAAGCACTGGGACCACCTCACCCAGGTCAAGAAGCCAGTCATCGCTGCTGTCAATGGCTATGCCTTTGGC
GGGGCTGTGAGCTTGCCATGATGTGTGATATCATCTATGCCGGTGAGAAGGCCAGTTTGCACAGCCGG
AGATCTTAATAGGAACCATCCCAGGTGCGGGCGGCACCCAGAGACTCACCCGTGCTGTTGGGAAGTCGCT
GGCGATGGAGATGGTCTCACCGGTGACCGGATCTCAGCCAGGACGCCAAGCAAGCAGGTCTTGTGAGC
AAGATTTGCTCTGTTGAGACTGGTGAAGAAGCCATCCAGTGTGCAGAAAAAATTGCCAGCAATTCTA
AAATTGTAGTAGCGATGGCCAAAGAATCAGTGAATGCAGCTTTTGAATGACATTAACAGAAGGAAGTAA
GTTGGAGAAGAACTCTTTTATTCAACCTTTGCCACTGATGACCGGAAAGAAGGGATGACCGCGTTTGTG
GAAAAGAGAAAGCCAACTTCAAAGACCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG200369 representing NM_004092
 Red=Cloning site Green=Tags(s)

MAALRVLLSCVRGPLRPPVRCPAWRPFASGANFEYIIAEKRGKNNVGLIQLNRPKALNALCDGLIDELN
 QALKIFEEDPAVGAIIVLTGGDKAFAAGADIKEMQNL SFQDCYSSKFLKHWDLHTQVKKPVI AAVNGYAFG
 GGCELAMMCDIIYAGEKAQFAQPEILIGTIPGAGGTQRLTRAVGKSLAMEMVLTGDRI SAQDAKQAGLVS
 KICPVELTVEEAIQCAEKIASNSKIVVAMAKESVNAAFEMTLTEGSKLEKLFYSTFATDDRKEGMTAFV
 EKRRKANFKDQ

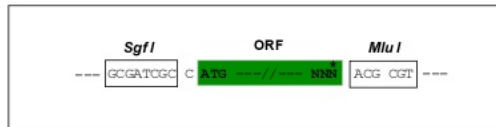
TRTRPLE - GFP Tag - V

Restriction Sites:

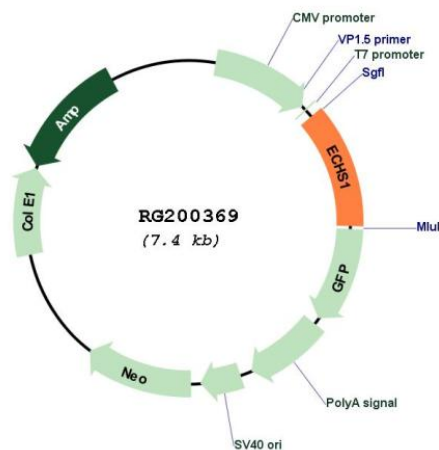
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_004092

ORF Size: 870 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:	<ol style="list-style-type: none">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_004092.2 , NP_004083.2
RefSeq Size:	1326 bp
RefSeq ORF:	873 bp
Locus ID:	1892
UniProt ID:	P30084
Cytogenetics:	10q26.3
Domains:	ECH
Protein Pathways:	beta-Alanine metabolism, Butanoate metabolism, Fatty acid elongation in mitochondria, Fatty acid metabolism, Limonene and pinene degradation, Lysine degradation, Metabolic pathways, Propanoate metabolism, Tryptophan metabolism, Valine, leucine and isoleucine degradation
Gene Summary:	The protein encoded by this gene functions in the second step of the mitochondrial fatty acid beta-oxidation pathway. It catalyzes the hydration of 2-trans-enoyl-coenzyme A (CoA) intermediates to L-3-hydroxyacyl-CoAs. The gene product is a member of the hydratase/isomerase superfamily. It localizes to the mitochondrial matrix. Transcript variants utilizing alternative transcription initiation sites have been described in the literature. [provided by RefSeq, Jul 2008]