

Product datasheet for **RC223135**

ECE1 (NM_001397) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ECE1 (NM_001397) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ECE1
Synonyms:	ECE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC223135 representing NM_001397
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCGGGGCGTGTGGCCGCCCGTGTCCGCCCTGCTGTGCGCGCTGGGGATGTCGACGTACAAGCGGG
 CCACGCTGGACGAGGAGGACCTGGTGGACTCGCTCTCCGAGGGCGACGCATACCCCAACGCCTGCAGGT
 GAACCTCCACAGCCCCGGAGTGCCAGAGGTGCTGGGCTGCACGACCCAGGTGGAGAAGCGGCTGGTG
 GTGTTGGTGGTACTTCTGGCGGCAGGACTGGTGGCCTGCTTGGCAGCACTGGGCATCCAGTACCAGACAA
 GATCCCCCTCTGTGTGCCTGAGCGAAGCTTGTGTCTCAGTGACCAGCTCCATCTTGAGCTCCATGGACCC
 CACAGTGGACCCCTGCCATGACTTCTTCAGCTACGCTGTGGGGCTGGATCAAGGCCAACCCAGTCCCT
 GATGGCCACTCACGCTGGGGACCTTCAGCAACCTCTGGGAACACAACCAAGCAATCATCAAGCACCTCC
 TCGAAAACCTCCACGGCCAGCGTGAGCGAGGAGAGAGAAAAGCGCAAGTATACTACCGTGCCTGCATGAA
 CGAGACCAGGATCGAGGAGCTCAGGGCCAAACCTCTAATGGAGTTGATTGAGAGGCTCGGGGGCTGGAAC
 ATCACAGTCCCTGGGCCAAGGACAACCTCCAGGACACCCCTGCAGGTGGTACCGCCCACTACCGCACCT
 CACCCCTCTTCTGTCTATGTCACTGCGGATTCCAAGAACTCCAACAGCAACGTGATCCAGGTGGACCA
 GTCTGGCCTGGGCTTGCCTCGAGAGACTATTACCTGAACAAAACGAAAACGAGAAGGTGCTGACCGGA
 TATCTGAACTACATGGTCCAGCTGGGGAAGCTGCTGGGCGGGGGGACGAGGAGGCCATCCGGCCCCAGA
 TGCAGCAGATCTTGACTTTGAGACGGCACTGGCAACATCACCATCCCACAGGAGAAGCGCCGTGATGA
 GGAGCTCATCTACCACAAAGTGACGGCAGCCGAGCTGCAGACCTTGGCACCCGCCATCAACTGGTTGCC
 TTTCTCAACACCATCTTCTACCCCGTGGAGATCAATGAATCCGAGCCTATTGTGGTCTATGACAAGGAAT
 ACCTTGAGCAGATCTCCACTCTCATCAACACCACCGACAGATGCCTGCTCAACAACATACATGATCTGGAA
 CCTGGTGCAGAAAACAAGCTCCTTCTTACCAGCGCTTTCAGGACCGGATGAGAAGTTTCATGGAAGTC
 ATGTACGGGACCAAGAAGACCTGTCTTCTCGCTGGAAGTTTTGCGTGAGTGACACAGAAAAACAACCTGG
 GCTTTGCGTTGGGCCCATGTTTGTCAAAGCAACCTTCGCCGAGGACAGCAAGAGCATAGCCACCGAGAT
 CATCCTGGAGATTAAGAAGGCATTTGAGGAAAGCCTGAGCACCCCTGAAGTGGATGGATGAGGAAACCCGA
 AAATCAGCCAAGGAAAAGGCCGATGCCATCTACAACATGATAGGATACCCCAACTTCATCATGGATCCCA
 AGGAGCTGGACAAAGTGTAAATGACTACACTGCAGTTCAGACCTCTACTTTGAAAATGCCATGCGGTT
 TTTCAACTTCTCATGGAGGTCCTGCCGATCAGCTCAGGAAAGCCCCAACAGAGATCAGTGGAGCATG
 ACCCCGCCATGGTGAACGCCTACTACTCGCCACCAAGAATGAGATTGTGTTCCGGCCGGGATCCTGC
 AGGCACCATCTACACACGCTCCTCACCAAGGCCTAAACTTTGGTGGCATAGGTGTCTGTCGTGGGCCA
 TGAGCTGACTCATGCTTTTGATGATCAAGGACGGGAGTATGACAAGGACGGGAACCTCCGGCCATGGTGG
 AAGAACTCATCCGTGGAGGCCTCAAGCGTCAGACCGAGTGCATGGTAGAGCAGTACAGCAACTACAGCG
 TGAACGGGGAGCCGGTGAACGGGCGGCACACCTGGGGGAGAACATCGCCGACAACGGGGGTCTCAAGGC
 GGCCTATCGGGCTTACCAGAACTGGGTGAAGAAGAACGGGGCTGAGCACTCGTCCCCACCTGGGCCTC
 ACCAATAACCAGCTCTTCTTCTGGGCTTTGCACAGGTCTGGTGTCCGTCGGCACACCTGAGAGCTCCC
 ACGAAGGCCTCATACCGATCCCACAGCCCTCTCGCTTCCGGGTCATCGGCTCCCTCTCCAATTCCAA
 GGAGTTCTCAGAACACTCCGCTGCCACCTGGCTCACCCATGAACCCGCTCACAAGTGCGAAGTCTGG

ACGCGTACGCGGGCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC223135 representing NM_001397
 Red=Cloning site Green=Tags(s)

MRGVWPPPVSAALLSALGMSTYKRATLDEEDLVDSLSEGDAYPNGLQVNFHSPRSGQRCWAARTQVEKRLV
 VLVVLLAAGLVACLAALGIQYQTRSPSVCLSEACVSVTSSILSSMDPTVDPCHDFFSYACGGWIKANPVP
 DGHSRWGTFSNLWEHNQAIKHLLENSTASVSEAERKAQVYRACMNETRIEELRAKPLMELIERLGGWN
 ITGPWAKDNFQDTLQVVTAHYRTSPFFSVYVSADSKNSNSNVIQVDQSGGLPSRDYYLNKTENEKVLTG
 YLNYMVQLGKLLGGDEEAIRPQQIILDFETALANITIPQEKRRDEELIYHKVTAELQTLAPAINWLP
 FLNTIFYPVEINESEPIVYDKEYLEQISTLINTTDRCLLNMYIWNLVKTSFSLDQRFQDADEKFMV
 MYGTTKCLPRWKFVSDTENNLGFALGPMFVKATFAEDSKSIATEIILEIKKAFEESSLTKWMDDETR
 KSAKEKADAIYNIIGYPNFIMDPKELDKVFNDYAVPDLYFENAMRFFNFSWRVTADQLRKAPNRDQWSM
 TPPMVNAYYSPTKNEIVFPAGILQAPFYTRSSPKALNFGGIGVVVGHETHAFDDQGREYDKDGNLRPWW
 KNSSVEAFKRQTECMVEQYSNYSVNGEPVNGRHTLGENIADNGGLKAAYRAYQNWVKNGAEHSLPTLGL
 TNNQLFFLGFAQVWCSVRTPESSHEGLITDPHSPSRFRVIGLSNSKEFSEHFRCPGSPMPPHKCEVW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3863_d05.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

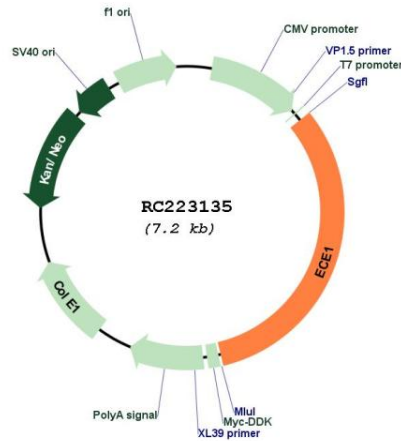
ACCN: NM_001397

ORF Size: 2310 bp

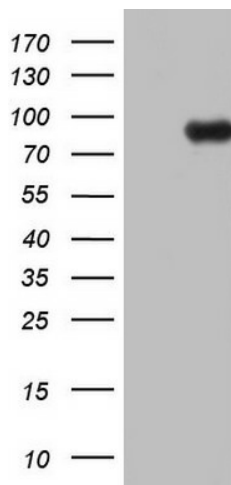
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001397.3
RefSeq Size:	2409 bp
RefSeq ORF:	2313 bp
Locus ID:	1889
UniProt ID:	P42892
Cytogenetics:	1p36.12
Domains:	Peptidase_M13
Protein Families:	Druggable Genome, Protease, Transmembrane
MW:	87 kDa

Gene Summary:

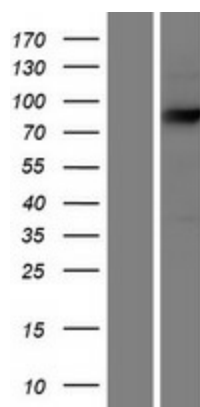
The protein encoded by this gene is involved in proteolytic processing of endothelin precursors to biologically active peptides. Mutations in this gene are associated with Hirschsprung disease, cardiac defects and autonomic dysfunction. Alternatively spliced transcript variants encoding different isoforms have been noted for this gene.[provided by RefSeq, Sep 2009]

Product images:


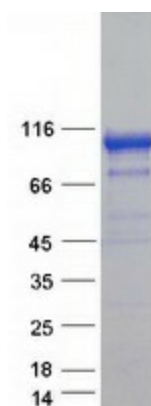
Circular map for RC223135



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ECE1 (Cat# RC223135, 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-ECE1 (Cat# [TA804823]). Positive lysates [LY419958] (100ug) and [LC419958] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419958]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223135 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ECE1 protein (Cat# [TP323135]). The protein was produced from HEK293T cells transfected with ECE1 cDNA clone (Cat# RC223135) using MegaTran 2.0 (Cat# [TT210002]).