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 RC215223

FECH (NM_001012515) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FECH (NM_001012515) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FECH
Synonyms:	EPP; EPP1; FCE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC215223 representing NM_001012515
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCGTTCACTCGGCGCAAACATGGCTGCGGCCCTGCGCGCCGCGGGCGTCCTGCTCCGCGATCCGCTGG
CATCCAGCAGCTGGAGGGTCTGTCAGCCATGGAGGTGGAAGTCAGGTGCAGCTGCAGCGGCCGTCACCAC
AGAAACAGCCCAGCATGCCCAGGGTGCAAAACCTCAAGTTCAACCGCAGAAGAGGTATGAGTCTAACATC
AGGAAGCCGAAAACTGGAATATTAATGCTAAACATGGGAGGCCCTGAAACTCTTGGAGATGTTCACGACT
TCCTTCTGAGACTCTTCTTGGACCGAGACCTCATGACACTTCCTATTCAGAATAAGCTGGCACCATTCAT
CGCCAAACGCCGAACCCCCAAGATTCAAGAGCAGTACCGCAGGATTGGAGGCGGATCCCCCATCAAGATA
TGGACTTCCAAGCAGGGAGAGGGCATGGTGAAGCTGCTGGATGAATTGTCCCCCAACACAGCCCCTCACA
AATACTATATTGGATTTCGGTACGTCCATCCTTTAACAGAAGAAGCAATTGAAGAGATGGAGAGAGATGG
CCTAGAAAGGGCTATTGCTTTCACACAGTATCCACAGTACAGCTGCTCCACCACAGGCAGCAGCTTAAAT
GCCATTTACAGATACTATAATCAAGTGGGACGGAAGCCCACGATGAAGTGGAGCACTATTGACAGGTGGC
CCACACATCACCTCCTCATCCAGTGCTTTGCAGATCATATTCTAAAGGAACTGGACCATTTTCCACTTGA
GAAGAGAAGCGAGGTGGTCATTCTGTTTTCTGCTCACTCACTGCCCATGTCTGTGGTCAACAGAGGCGAC
CCATATCCTCAGGAGGTAAGCGCCACTGTCCAAAAAGTCATGGAAAGGCTGGAGTACTGCAACCCCTACC
GACTGGTGTGGCAATCCAAGGTTGGTCCAATGCCCTGGTTGGGTCCTCAAACAGACGAATCTATCAAAGG
GCTTTGTGAGAGGGGGAGGAAGAATATCCTCTTGGTTCCGATAGCATTTACCAGTGACCATATTGAAACG
CTGTATGAGCTGGACATCGAGTACTCTCAAGTTTTAGCCAAGGAGTGTGGAGTTGAAAACATCAGAAGAG
CTGAGTCTCTTAATGGAAATCCATTGTTCTCTAAGGCCCTGGCCGACTTGGTGCATTCACACATCCAGTC
AAACGAGCTGTGTTCCAAGCAGCTGACCCTGAGCTGTCCGCTCTGTGTCAATCCTGTCTGCAGGGAGACT
AAATCCTTCTTCACCAGCCAGCAGCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC215223 representing NM_001012515
Red=Cloning site Green=Tags(s)

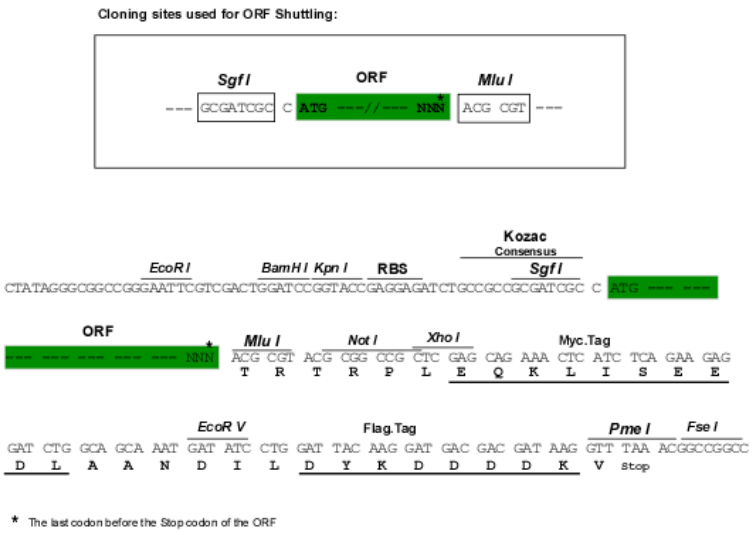
MRSLGANMAAALRAAGVLLRDPLASSSWRVCQPWRWKSGAAAAAVTTETAQHAQGAKPQVQPQKRYESNI
RKPKTGILMLNMGGPETLGDVHDFLLRLFLDRDLMTLPIQNKLAPFIAKRRTPKIQEQYRRIGGGSPIKI
WTSKQGEGMVKLLDELSPNTAPHKYYIGFRYVHPLTEEAIEEMERDGLERAIAFTQYPQYSCSTTGSSLN
AIYRYYNQVGRKPTMKWSTIDRWPTHHLLIQCFADHILKELDHFPLEKRSEVVILFSAHSLPMSVVNRGD
PYPQEVSATVQKVMERLEYCNPYRLVWQSKVGPMPWLGPQTDESIKGLCERGRKNILLVPIAFTSDHIET
LYELDIEYSQVLAKECGVENIRRAESLNGNPLFSKALADLVHSHIQSNELCSKQLTLSCPLCVNPVCRET
KSFFTSQQL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8059_c07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001012515

ORF Size: 1287 bp

OTI Disclaimer: 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.

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.

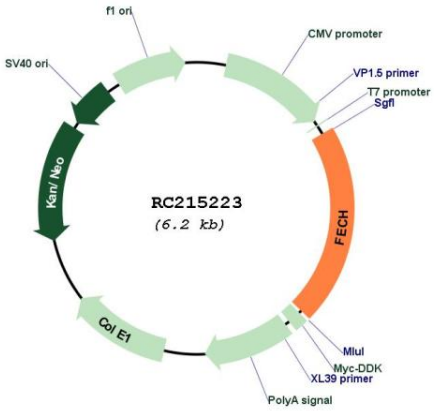
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.

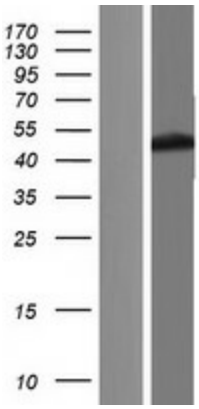
RefSeq: NM_001012515.4

RefSeq Size:	3835 bp
RefSeq ORF:	1290 bp
Locus ID:	2235
UniProt ID:	P22830
Cytogenetics:	18q21.31
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Porphyrin and chlorophyll metabolism
MW:	48.63 kDa
Gene Summary:	The protein encoded by this gene is localized to the mitochondrion, where it catalyzes the insertion of the ferrous form of iron into protoporphyrin IX in the heme synthesis pathway. Mutations in this gene are associated with erythropoietic protoporphyria. Two transcript variants encoding different isoforms have been found for this gene. A pseudogene of this gene is found on chromosome 3.[provided by RefSeq, May 2010]

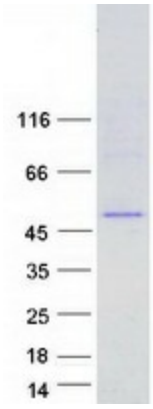
Product images:



Circular map for RC215223



Western blot validation of overexpression lysate (Cat# [LY422881]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215223 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FECH protein (Cat# [TP315223]). The protein was produced from HEK293T cells transfected with FECH cDNA clone (Cat# RC215223) using MegaTran 2.0 (Cat# [TT210002]).