

Product datasheet for **RC226347**

Hephaestin (HEPH) (NM_001130860) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hephaestin (HEPH) (NM_001130860) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HEPH
Synonyms:	CPL
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC226347 representing NM_001130860 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTGGGCCATGGAGTCAGGCCACCTCCTCTGGGCTCTGCTGTTTCATGCAGTCCTTGTGGCCTCACTGA
CTGATGGAGCCACTCGAGTCTACTACCTGGGCATCCGGGATGTGCAGTGGAAGTATGCTCCCAAGGGAAG
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CGGATAGGGGAACTACAAGAAGACCATCTATAAAGAATACAAGGATGACTCATACACAGATGAAGTGG
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CCTGAAGAATTTGCCACTCGTCCCTATACCATCCACCCTCATGGTGTCTTCTACGAGAAGGACTCTGAA
GGTCCCTATACCCAGATGGCTCCTCTGGGCCACTGAAAGCTGATGACTCTGTTCCCGGGGGGCAGCC
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CCTTTGAGAAAGTAAACATACCGCTGGACAGTCCCCCTCATGCCGGTCCCCTGCTCAGGATCCTGCTTG
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Protein Sequence: >RC226347 representing NM_001130860
 Red=Cloning site Green=Tags(s)

MWAMESGHLWALLFMQSLWPQLTDGATRVYYLIGIRDVQWNYAPKGRNVITNQPLDSDIVASSFLKSDKN
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 GSLYPDGSSGPKADDSVPPGGSHIYNWTIPEGHAPTADAPACL TWIYHSHVDAPRIATGLIGPLITCK
 RGALDGNSPQQRQDVHDFFLLFSVVDENLSWHLNENIATYCDPASVDKEDETFQESNRMHAINGFVFG
 NLPENMCAQKRVAWHLFGMGNEIDVHTAFFHGQMLTTRGHHTDVANIFPATFVT AEMVPWEPGTWLI SC
 QVNSHFRDGMQALYKVKSCSMAPPVDLLTGKVRQYFIEAHEIQWDYGPMGHDGSGTKNLREPGSISDKFF
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 FYEKDYEGTVYNDGSSYPGLVAKPF EKVTYRWTVPPHAGPTAQDPACL TWMYFSAADPIRDTNSGLVGPL
 LVCRAGALGADGKQKGVDFEFLFTVLDENKSWYSNANQAAAMDFRLLSEIEGFQDSNRMHAINGFL
 FSNLPRLDMCKGDTVAWHLLGLGTETDVHGVMFQGNVQLQGMKGAAMLPHTFVMAIMQPDNLGTFEI
 YCQAGSHREAGMRAIYNVSQCPGHQATPRQRYQAARIYYIMAEVEWDYCPDRSWEREWNHQSEKDSYGY
 IFLSNKDGLLSRYKKA VFREYTDGTFRIPRPTGPEEHLGILGPLIKGEVDILTVVFKNNASRPYSVH
 AHGVLESTTVWPLAAEPGEVVYQWNI PERSGPGPND SACYSWIYYSAVDPIKDMYSGLVGLAICQKGI
 LEPHGGRSDMDREFALLFLIFDENKSWYLEENVATHGSQDPGSINLQDETFLESNMHAINGKLYANLRG
 LTMYQGERVAWYMLAMGQDVLHTIHFHAESFLYRNGENYRADVVDLFPGTFEVEMVASNP GTWLMHCH
 VTDHVHAGMETLFTVFSRTEHLSPLTVITKETEKVPPRDIEEGNVKMLGMQIPIKNVEMLASV LVAISVT
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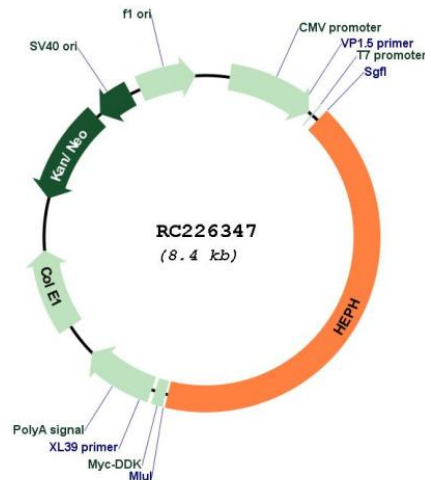
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001130860

ORF Size: 3480 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.

RefSeq: [NM_001130860.4](#)

RefSeq Size: 4454 bp

RefSeq ORF: 3474 bp

Locus ID: 9843

UniProt ID: [Q9BQS7](#)

Cytogenetics: Xq12

Protein Families: Druggable Genome, Transmembrane

MW: 130.8 kDa

Gene Summary: This gene encodes a member of the multicopper oxidase protein family. The encoded protein is involved in the transport of dietary iron from epithelial cells of the intestinal lumen into the circulatory system, and may be involved in copper transport and homeostasis. In mouse, defects in this gene can lead to severe microcytic anemia. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2013]