

## Product datasheet for RC204175

### Hephaestin (HEPH) (NM\_014799) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Hephaestin (HEPH) (NM_014799) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Hephaestin
Synonyms:	CPL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204175 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGTCAGGCCACCTCCTCTGGGCTCTGCTGTTTCATGCAGTCCTTGTGGCCTCAACTGACTGATGGAG  
CCACTCGAGTCTACTACCTGGGCATCCGGGATGTGCAGTGAACATGCTCCCAAGGGAAGAAATGTCAT  
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GGAACCTACAAGAAGACCATCTATAAGAATACAAGGATGACTCATAACAGATGAAGTGGCCAGCCTG  
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ACACAGCATTTTTCCATGGACAGATGCTGACTACCCGTGGACACCACACTGATGTGGCTAACATCTTCC  
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AGTCACTTTTCGAGATGGCATGCAGGCACTCTACAAGGTCAAGTCTTGCTCCATGGCCCTCCTGTGGACC  
TGCTCACAGGCAAAGTTCGACAGTACTTATTGAGGCCCATGAGATTCAATGGGACTATGGCCCGATGGG  
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AAAGACTATGAAGGCACTGTGTACAATGATGGCTCATCTTACCCTGGCTTGGTTGCCAAGCCCTTGAGA  
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
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Protein Sequence: >RC204175 protein sequence  
 Red=Cloning site Green=Tags(s)

MESGHLWALLFMQSLWPQLTDGATRVYVLGIRDVQWNYAPKGRNVITNQPLDSDIVASSFLKSDKNRIG  
 GTYKTIYKEYKDDSYTDEVAQPAWLGFLGPVLQAEVGDVILIHLKNFATRPYTIHPHGVEYKDESEGL  
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 LDGNSPQRQDVHDHDFLLF SVVDENLSWHLNENIATYCSDPASVDKEDETFQESNRMHAINGFVGNLP  
 ELNMQAQKRVAVHLFGMGNEIDVHTAFFHGQMLTTRGHHTDVANIFPATFVTAEMVPWEPGTWLISCQVN  
 SHFRDGMQALYKVKSCSMAPPVLLTGKVRQYFIEAHEIQWDYGPMGHDGSTGKNLREPGISDKFFQKS  
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 RAGALGADGKQKGVDFKFFLLFTVLDENKSWYSNANQAAAMLDFRLLSEIEGFQDSNRMHAINGFLFSN  
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 HGGRSDMDREFALLFLIFDENKSWYLEENVATHGSQDPSINLQDETFLESNKMHAINGKLYANLRGLTM  
 YQGERVAWYMLAMQDVLHTIHFHAESFLYRNGENYRADVVDLFPGTFEVEMVASNPGTWLMHCHVTD  
 HVHAGMETLFTVFSRTEHL SPLTVITKETEKA VPPRDIEEGNVKMLGMQIPIKNVEMLASVLVAISVTL L  
 LVV LALGGVVWYQHRQRKLRNRRSILDDSFKLLSFKQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6712\\_f05.zip](https://cdn.origene.com/chromatograms/mk6712_f05.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

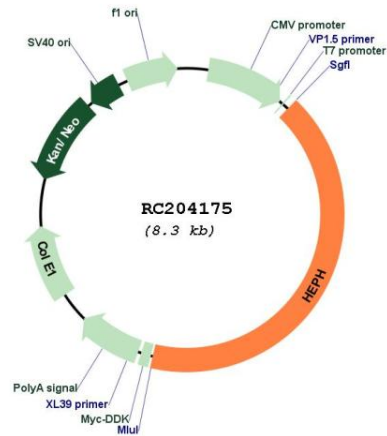


ACCN: NM\_014799

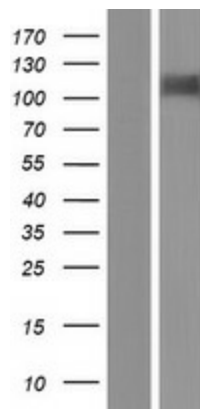
ORF Size: 3477 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq Size:</b>	4284 bp
<b>RefSeq ORF:</b>	2676 bp
<b>Locus ID:</b>	9843
<b>UniProt ID:</b>	<a href="#">Q9BQS7</a>
<b>Cytogenetics:</b>	Xq12
<b>Domains:</b>	Cu-oxidase
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>MW:</b>	130.4 kDa
<b>Gene Summary:</b>	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]

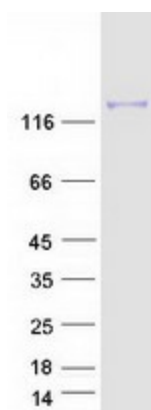
Product images:



Circular map for RC204175



Western blot validation of overexpression lysate (Cat# [LY415008]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204175 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HEPH protein (Cat# [TP304175]). The protein was produced from HEK293T cells transfected with HEPH cDNA clone (Cat# RC204175) using MegaTran 2.0 (Cat# [TT210002]).