

## Product datasheet for **RC200039**

### HEMK1 (NM\_016173) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HEMK1 (NM_016173) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HEMK1
Synonyms:	HEMK; MPRMC; MTQ1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200039 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGCTTTGGGGCCGAATGCTGTGGGCCCTCCTGTCTGGCCAGGGAGGAGGGAAAGTACCCGGGGCT  
GGGCCTTCAGCTCATGGCAACCCCAACCACCTCTGGCTGGGTTATCCAGTGCCATAGAAGTGGTCAGCCA  
CTGGACTGGGGTCTTTGAGAAGAGGGGTATCCCTGAGGCCGGGAATCCAGTGAGTACATCGTGGCTCAT  
GTCCTTGGAGCCAAAACATTTAGAGCCTGAGGCCGGCACTTTGGACCCAGCCCTTGACCTCTCAGCAAC  
TACAGTGTATCCGGGAGCTGAGTAGCCGTGATTGCAGAGGATGCCGGTGCAGTACATCCTTGGAGAGTG  
GGACTTCCAGGGGCTCAGCCTAAGGATGGTGCCCCAGTGTATTCGCGGCCAGAAACAGAGGAACTG  
GTTGAGTGGGTGCTGGAAGAGGTGGCCAGAGGTCCCATGCTGTGGGATCCCCAGGCAGCCCCCTCATT  
TGGAGGTGGGCTGCGGATCAGGAGCCATCTCCCTCAGCCTGCTGAGCCAGCTCCCCAGAGCCGAGTCAT  
TGCTGTGGATAAGCGGGAAGCTGCTATCTCTGACCCATGAGAATGCTCAGAGGCTTCGGTTGCAGGAC  
AGGATTTGGATCATCCACCTCGACATGACCTCAGAAAGGAGCTGGACACACCTGCCCTGGGGCCCATGG  
ACCTGATTGTAGCAACCCTCCCTACGCTTCCACCAGGACATGGAGCAGCTGGCCCTGAGATCCGCAG  
CTATGAAGACCCCGGGCCCTGGATGGTGGGAGGAGGGCATGGACATCATTACCCACATTCTGGCCTTG  
GCACCCCGGCTCCTGAAAGACTCTGGTAGTATCTTCTTAGAAGTGGACCCAAAGCCACCCGGAGCTTGCA  
GCAGCTGGCTTACAGAGCCGGCCTGACCTGTACCTAATCTTGTGGCTGTGCGCAGGGACTTCTGTGGGAG  
GCCCGGTTCTGCATATCCGGAGGTCTGGCCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC200039 protein sequence  
Red=Cloning site Green=Tags(s)

MELWGRMLWALLSGPGRRGSTRGWAFSSWQPPLAGLSSAIELVSHWTGVFEKRGIPAESESSEYIVAH  
 VLGAKTFQSLRPALWTQPLTSQQLQCIRELSSRRLQRMVQYILGEWDFQGLSLRMVPPVFIPRPETEEL  
 VEWVLEEVAQRSHAVGSPGSPLILEVGCSSGAISSLSQLPQSRVIAVDKREAAISLTHENAQRLRLQD  
 RIWIIHLDMTSERSWTHLPWGPMDLIVSNPPYVFHQDMEQLAPEIRSYEDPAALDGEEGMDIITHILAL  
 APRLLKDSGSIFLEVDPRHPELVSSWLQSRPDLYLNLVAVRRDFCGRPRFLHIRRSSGP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6397\\_g04.zip](https://cdn.origene.com/chromatograms/mk6397_g04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_016173

**ORF Size:** 1014 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\\_016173.2](#)

**RefSeq Size:** 5862 bp

**RefSeq ORF:** 1017 bp

**Locus ID:** 51409

**UniProt ID:** [Q9Y5R4](#)

**Cytogenetics:** 3p21.31

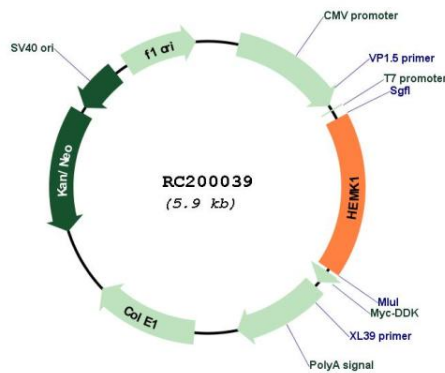
**Protein Families:** Druggable Genome

**Protein Pathways:** Androgen and estrogen metabolism, Histidine metabolism, Selenoamino acid metabolism, Tyrosine metabolism

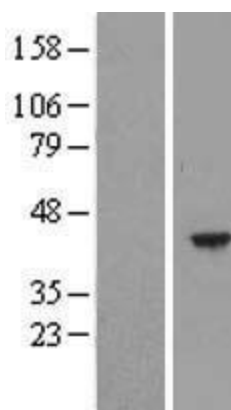
**MW:** 38.2 kDa

**Gene Summary:** N5-glutamine methyltransferase responsible for the methylation of the glutamine residue in the universally conserved GGQ motif of the mitochondrial translation release factor MTRF1L. [UniProtKB/Swiss-Prot Function]

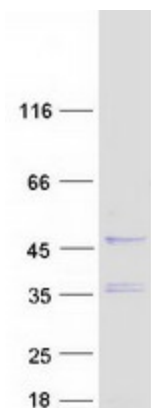
### Product images:



Circular map for RC200039



Western blot validation of overexpression lysate (Cat# [LY414143]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200039 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HEMK1 protein (Cat# [TP300039]). The protein was produced from HEK293T cells transfected with HEMK1 cDNA clone (Cat# RC200039) using MegaTran 2.0 (Cat# [TT210002]).