

## Product datasheet for RC220707

### Factor H (CFH) (NM\_000186) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Factor H (CFH) (NM_000186) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Factor H
Synonyms:	AHUS1; AMBP1; ARMD4; ARMS1; CFHL3; FH; FHL1; HF; HF1; HF2; HUS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220707 representing NM_000186 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGACTTCTAGCAAAGATTATTTGCCTTATGTTATGGGCTATTTGTGTAGCAGAAGATTGCAATGAAC  
TTCCTCCAAGAAGAAATACAGAAATCTGACAGGTTCTGGTCTGACCAAACATATCCAGAAGGCACCCA  
GGCTATCTATAAATGCCGCCCTGGATATAGATCTCTGGAAATGTAATAATGGTATGCAGGAAGGGAGAA  
TGGGTTGCTCTTAATCCATTAAGGAAATGCAGAAAAGGCCCTGTGGACATCCTGGAGATACTCCTTTT  
GTACTTTTACCCTTACAGGAGGAAATGTGTTTGAATATGGTGTAAAAGCTGTGTATACATGTAATGAGGG  
GTATCAATTGCTAGGTGAGATAATTACCGTGAATGTGACACAGATGGATGGACCAATGATATCCCTATA  
TGTGAAGTTGTGAAGTGTACCAGTGACAGCACCAGAGAATGGAAAAATGTCAGTAGTGAATGGAAC  
CAGATCGGGAATACCATTTGGACAAGCAGTACGGTTTGTATGTAATCAGGCTACAAGATTGAAGGAGA  
TGAAGAAATGCATTGTTTCAGACGATGGTTTTGGAGTAAAGAGAAACCAAGTGTGTGGAATTTTCATGC  
AAATCCCAGATGTTATAAATGGATCTCTATATCTCAGAAGATTATTTAAGGAGAATGAACGATTTTC  
AATATAAATGTAACATGGGTTATGAATACAGTGAAGAGGAGATGCTGTATGCACTGAATCTGGATGGCG  
TCCGTTGCCTTCATGTGAAGAAAAATCATGTGATAATCCTTATATTCCAATGGTACTACTCACCTTTA  
AGGATTAACACAGAAGTGGAGATGAAATCACGTACCAGTGAAGAAATGGTTTTATCCTGCAACCCGGG  
GAAATACAGCAAAATGCACAAGTACTGGCTGGATACCTGCTCCGAGATGTACCTTGAAACCTTGTGATTA  
TCCAGACATTAACATGGAGTCTATATCATGAGAATATGCGTAGACCATACTTTCCAGTAGCTGTAGGA  
AAATATTACTCTATTACTGTGATGAACATTTGAGACTCCGTCAGGAAGTTACTGGGATCACATTCATT  
GCACACAAGATGGATGGTCGCCAGCAGTACCATGCCTCAGAAAATGTTATTTTCTTATTTGGAAAAATGG  
ATATAATCAAAATCATGGAAGAAAGTTTGTACAGGTAATCTATAGACGTTGCCTGCCATCCTGGCTAC  
GCTCTTCCAAAAGCGCAGACCACAGTTACATGTATGGAGAATGGCTGGTCTCTACTCCCAGATGCATCC  
GTGTCAAAACATGTTCCAATCAAGTATAGATATTGAGAATGGGTTTATTTCTGAATCTCAGTATACATA  
TGCCTTAAAAGAAAAAGCGAAATATCAATGCAAACTAGGATATGTAACAGCAGATGGTGAACATCAGGA



[View online >](#)

TCAATTACATGTGGGAAAGATGGATGGTCAGCTCAACCCACGTGCATTAATCTTGTGATATCCCAGTAT  
TTATGAATGCCAGAACTAAAAATGACTTCACATGGTTTAAAGCTGAATGACACATTGGACTATGAATGCCA  
TGATGGTTATGAAAGCAATACTGGAAGCACCCTGGTTCCATAGTGTGTGGTTACAATGGTTGGTCTGAT  
TTACCCATATGTTATGAAAGAGAATGCGAACTTCTAAAAATAGATGTACACTTAGTTCCTGATCGCAAGA  
AAGACCAGTATAAAGTTGGAGAGGTGTTGAAATTCCTGCAAACCAGGATTTACAATAGTTGGACCTAA  
TTCCGTTTCAGTGCTACCACTTTGGATTGTCTCCTGACCTCCCAATATGTAAGAGCAAGTACAATCATGT  
GGTCCACCTCCTGAACTCCTCAATGGGAATGTTAAGGAAAAACGAAAGAAGAATATGGACACAGTGAAG  
TGGTGGAAATATTATTGCAATCCTAGATTTCTAATGAAGGGACCTAATAAAATTCATGTGTGATGGAGA  
GTGGACAACCTTACCAGTGTGTATTGTGGAGGAGTACCTGTGGAGATATACCTGAACTTGAACATGGC  
TGGGCCACGCTTCTTCCCTCCTTATTACTATGGAGATTGAGTGGAAATCAATTGCTCAGAATCATTTA  
CAATGATTGGACACAGATCAATTACGTGTATTCATGGAGTATGGACCAACTTCCCAGTGTGTGGCAAT  
AGATAAECTTAAGAAGTGCAATCATCAAAATTAATTATACTTGAGGAACATTTAAAAACAAGAAGGAA  
TTCGATCATAATTCTAACATAAGGTACAGATGTAGAGGAAAAGAAGGATGGATACACACAGTCTGCATAA  
ATGGAAGATGGGATCCAGAAGTGAAGTCAATGGCACAATAACAATTATGCCACCTCCACCTCAGAT  
TCCCAATTCTCACAATATGACAACCACACTGAATTATCGGGATGGAGAAAAGTATCTGTCTTTGCCAA  
GAAAAATTCTAATTCAGGAAGGAGAAGAAATTACATGCAAAGATGGAAGATGGCAGTCAATACCACTCT  
GTGTTGAAAAAATTCATGTTTCAACACCTCAGATAGAACACGGAACCATTAATTCATCCAGGCTTTC  
ACAAGAAAGTTATGCACATGGGACTAAATGAGTTATACTTGTGAGGGTGGTTTCAGGATATCTGAAGAA  
AATGAAACAACATGCTACATGGGAAAAATGGAGTTCTCCACCTCAGTGTGAAGGCCCTTCTTGAAATCTC  
CACCTGAGATTTCTCATGGTGTGTAGCTCACATGTCAGACAGTTATCAGTATGGAGAAGAAGTTACGTA  
CAAATGTTTTGAAGTTTTGGAATTGATGGGCCGCAATTGCAAAATGCTTAGGAGAAAAATGGTCTCAC  
CCTCCATCATGCATAAAAAACAGATTGTCTCAGTTTACCTAGCTTTGAAAAATGCCATACCCATGGGAGAGA  
AGAAGGATGTGTATAAGGCGGGTGAGCAAGTACTTACACTTGTGCAACATATTACAAAAATGGATGGAGC  
CAGTAATGTAACATGCATTAATAGCAGATGGACAGGAAGGCCAACATGCAGAGACACCTCCTGTGTGAAT  
CCGCCCCACAGTACAAAATGCTTATATAGTGTGAGACAGATGAGTAAATATCCATCTGGTGTGAGAGTAC  
GTTATCAATGTAGGAGCCCTTATGAAATGTTTGGGGATGAAGAAGTGTGTGTTTAAATGGAACTGGAC  
GGAACCACCTCAATGCAAAGATTCTACAGGAAAAATGTGGGCCCTCCACCTATTGACAATGGGGACATT  
ACTTCATCCCGTTGTCAGTATATGCTCCAGCTTCATCAGTTGAGTACCAATGCCAGAATTGTATCAAC  
TTGAGGGTAACAAGCGAATAACATGTAGAAATGGACAATGGTCCAGAACCAAAAATGCTTACATCCGTG  
TGTAATATCCCGAGAAATATGGAAAAATATAACATAGCATTAAAGGTGGACAGCCAAACAGAAGCTTTAT  
TCGAGAACAGGTGAATCAGTTGAATTTGTGTGTAACGGGGATATCGTCTTTCATCAGTCTCACACAT  
TGCGAACCAACATGTTGGGATGGGAACTGGAGTATCCAACCTGTGCAAAAAGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC220707 representing NM\_000186  
 Red=Cloning site Green=Tags(s)

MRLLAKIICLMLWAICVAEDCNELPPRRNTEILTGSWSDQTYPEGTQAIYKCRPGYRSLGNVIMVCRKGE  
 WVALNPLRKCQKRPCGHGDTDFGTFLLTGGNVFEYGVKAVYTCNEGYQLLGEINYRECDTDGWTNDIPI  
 CEVVKCLPVTAPENKIVSSAMEPDREYHFGQAVRFVCNSGYKIEGDEEMHCSDDGFWSEKPKCVCVEISC  
 KSPDVINGSPISQKIIYKENERFYKCNMGYEYSERGDVCTESGWRPLPSCEEKSCDNPYIPNGDYSP  
 RIKHRTGDEITYQCRNGFYPATRGNTAKCTSTGWIPAPRCTLKPCDYDPIKHGGLYHENMRRPYFPVAVG  
 KYYSYYCDEHFETPSGSYWDHIHCTQDGWSPAVPCLRKCYFPYLENGYNQNHGRKFVQGKSIDVACHPGY  
 ALPKAQTTVTCMENGWSPTRCIRVKTKCSKSSIDIENGFISESQYTYALKEKAKYQCKLGYVTADGETSG  
 SITCGKDGWSAQPTCIKSCDIPVFMNARTKNDFTWFKLNDLDYECHDGYESNTGSTTGSIVCGYNGWSD  
 LPICYERECLEPKIDVHLPDRKKDQYKVGVLKFSCKPGFTIVGPNVQCYHFGLSPDLPICKEQVQSC  
 GPPPELLNGNVKEKTKEEYGHSEVVEYCNPRFLMKGPNIQCVDGEWTLTPVCIVEESTCGDIPLEHGH  
 WAQLSSPPYYYGDSVEFNCSESF TMIGHRSITCIHGVWTQLPQCVAIDKLKCKSSNLIILEHLKNKKE  
 FDHNSNIRYRCRKGEGWIHTVCINGRWDPEVNCSMAQIQLCPPPPQIPNSHMTTTLNRYRDEKVSVLCQ  
 ENYLIQEGEEITCKDGRWQSIPLCVEKIPCSQPPQIEHGTINSSRSSQESYAHGTKLSYTCGEGFRISEE  
 NETTCYMGKWSPPQCEGLPCKSPPEISHGVVAHMSDSYQYGEVYKCFEGFGIDGPAIAKCLGEKWSH  
 PPSCIKTDCLSLPSFENAIIPMGEKKDVYKAGEQVYTCATYKMDGASNVTCINSRWTGRPTCRDTSVNV  
 PPTVQNAIYVSRQMSKYPGSEVRYQCRSPYEMFGDEEVMCLNGNWTEPPQCKDSTGKCGPPPIDNGDI  
 TSFPLSVYAPASSVEYQCQNL YQLEGNKRICTRNGQWSEPPKCLHPCVISREIMENYNIALRWTAKQKLY  
 SRTGESVEFVCKRGYRLSSRSHTLRITTCWDGKLEYPTCAKR

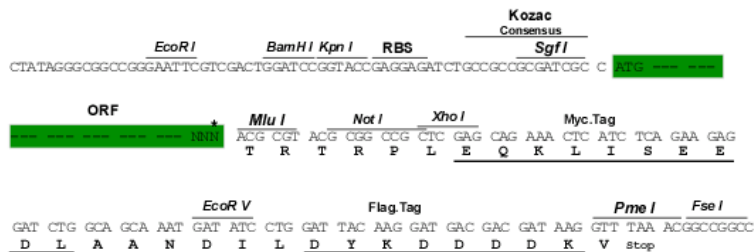
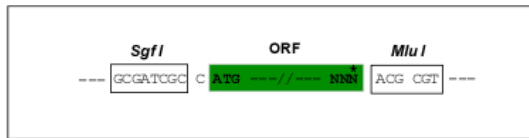
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

ACCN: NM\_000186

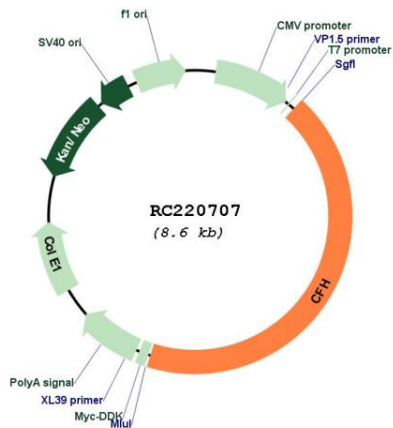
ORF Size: 3693 bp

<b>OTI Disclaimer:</b>	<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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a></p>
<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:</b>	<a href="#">NM_000186.4</a>
<b>RefSeq Size:</b>	4004 bp
<b>RefSeq ORF:</b>	3696 bp
<b>Locus ID:</b>	3075
<b>UniProt ID:</b>	<a href="#">P08603</a>
<b>Cytogenetics:</b>	1q31.3
<b>Domains:</b>	CCP
<b>Protein Families:</b>	Druggable Genome, Secreted Protein
<b>Protein Pathways:</b>	Complement and coagulation cascades
<b>MW:</b>	139.07 kDa

**Gene Summary:**

This gene is a member of the Regulator of Complement Activation (RCA) gene cluster and encodes a protein with twenty short consensus repeat (SCR) domains. This protein is secreted into the bloodstream and has an essential role in the regulation of complement activation, restricting this innate defense mechanism to microbial infections. Mutations in this gene have been associated with hemolytic-uremic syndrome (HUS) and chronic hypocomplementemic nephropathy. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Oct 2011]

**Product images:**



Circular map for RC220707