

Product datasheet for **MG218690**

Cfh (NM_009888) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cfh (NM_009888) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cfh
Synonyms:	Mud-1; NOM; Sas-1; Sas1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG218690 representing NM_009888 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTACAGCACAGATTTCTCTTGGAGTCAGTTGGTCCCAGAAAGATCCAAATTATGAGACTGTCAGCAA
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ACATCCTATAGATGTAAGCAGGGATATGTGACAAACTGGAGAAATATCAGGATCAATAACTTGCCTTC
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TCGTACAAAGTGCAATTAATGGCACCATCAATTATCCCCTTGTGTA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG218690 representing NM_009888
 Red=Cloning site Green=Tags(s)

MVQHRFLLESVGP RKIQIMRLSARI IWLILWTVCAAEDCKGPPPRENSEILSGSWSEQLYPEGTQATYKC
 RPGYRTLGTIVKVKNGKVVASNP SRICRKKPCGHPGDT PFGSFR LAVGSQFEFGAKVVYTCDDGYQLLG
 EIDYRECGADGWINDIPLCEVVKCLPVTELENGRIVS GAAETDQEYFFGQVVRFCNSGFKIEGHKEIHC
 SENGWSNEKPRC VEILCTPPRVENG DGINVKPVYKENERYHYKCKHGYVPKERGDAVCTGSGWSSQ PFC
 EEKRCSPPYILNGIYTPHRIIHRSDDEIRYECNYGFYPTGSTVSKCTPTGWIPVPRCT LKPCFEFPQFKY
 GRLYYEE SLRPNFPVSI GNKYSYKCDNGFSPPSGYSWDYLRCTAQGWEPEVPCVRKCVFHYVENGDSAYW
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 TVKYLDGEKLSVLCQDN YLTQDSEEMVCKDGRWQSLPRCIEKIPCSQPPTIEHGSINLPRSEERRDSIE
 SSSHEHGTTFSYV CDDGFRIPEENRITCYMGK WSTPPRCVGLPCGPPPSIPLGTVSLELESYQHGE EVTY
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 DTVTCVNSRWIGQPVCKD NSCVDPHPVNATIVTRTKNKYLHGDRVRYECNKPLELFGQVEVMCENGIWT
 EKPKCRDSTGKCGPPPIDNGDITSLSPVYEPLSSVEYQCQKYLLKGKKTITCRNGK WSEPPTCLHAC
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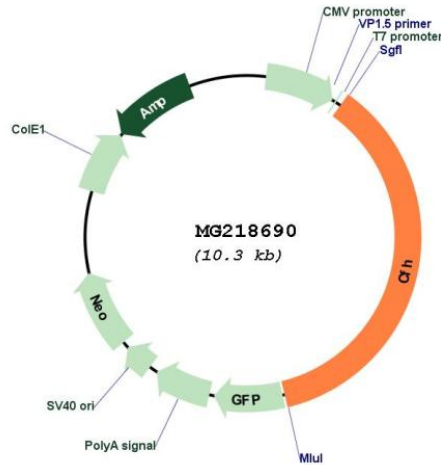
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_009888

ORF Size: 3756 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_009888.3](#), [NP_034018.2](#)

RefSeq Size: 4365 bp

RefSeq ORF: 3759 bp

Locus ID: 12628

UniProt ID: [P06909](#)

Cytogenetics: 1 F

Gene Summary: Glycoprotein that plays an essential role in maintaining a well-balanced immune response by modulating complement activation. Acts as a soluble inhibitor of complement, where its binding to self markers such as glycan structures prevents complement activation and amplification on cell surfaces. Accelerates the decay of the complement alternative pathway (AP) C3 convertase C3bBb, thus preventing local formation of more C3b, the central player of the complement amplification loop. As a cofactor of the serine protease factor I, CFH also regulates proteolytic degradation of already-deposited C3b. In addition, mediates several cellular responses through interaction with specific receptors. For example, interacts with CR3/ITGAM receptor and thereby mediates the adhesion of human neutrophils to different pathogens. In turn, these pathogens are phagocytosed and destroyed.[UniProtKB/Swiss-Prot Function]