

## Product datasheet for **RG200499**

### Complement factor B (CFB) (NM\_001710) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Complement factor B (CFB) (NM_001710) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CFB
Synonyms:	AHUS4; ARMD14; BF; BFD; CFAB; CFBD; FB; FBI12; GBG; H2-Bf; PBF2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide  
Sequence:**

>RG200499 representing NM\_001710  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGGGAGCAATCTCAGCCCCAACTCTGCCTGATGCCCTTTATCTTGGCCTCTTGTCTGGAGGTGTGA  
 CCACCACTCCATGGTCTTTGGCCTGGCCCCAGGGATCCTGCTCTCTGGAGGGGTAGAGATCAAAGGCGG  
 CTCTTCCGACTTCTCCAAGAGGGCCAGGCACTGGAGTACGTGTCTCTTCTGGCTTCTACCCGTACCCCT  
 GTGCAGACACGTACCTGCAGATCTACGGGGTCTGGAGCACCTGAAGACTCAAGACAAAAGACTGTCA  
 GGAAGGCAGAGTGCAGAGCAATCCACTGTCCAAGACCACGACTTCGAGAACGGGGAATACTGGCCCCG  
 GTCTCCCTACTACAATGTGAGTGATGAGATCTTTTCCACTGCTATGACGGTTACTACTCTCCGGGCTCT  
 GCCAATCGCACCTGCCAAGTGAATGGCCGGTGGAGTGGCAGACAGCGATCTGTGACAACGGAGCGGGGT  
 ACTGCTCAACCCGGGCATCCCCATTGGCACAAGGAAGTGGCAGCCAGTACCGCCTTGAAGACAGCGT  
 CACCTACCACTGCAGCCGGGGTACCCTGCGTGGCTCCAGCGCGCAACGTGTGAGGAAGGTGGCTCT  
 TGGAGCGGGACGGAGCCTTCTGCCAAGACTCCTTCATGTACGACACCCCTCAAGAGGTGGCCGAAGCTT  
 TCCTGTCTTCCCTGACAGAGACCATAGAAGGAGTCGATGCTGAGGATGGGCACGGCCAGGGGAACAACA  
 GAAGCGGAAGATCGTCTGGACCCTTCAAGGCTCCATGAACATCTACCTGGTGTAGATGGATCAGACAGC  
 ATTTGGGGCCAGCAACTTCAAGGAGCAAAAAGTGTCTAGTCACTTAATTGAGAAGGTGGCAAGTTATG  
 GTGTGAAGCCAAGATATGGTCTAGTGACATATGCCACATACCCCCAAATTTGGGTCAAAGTGTCTGAAGC  
 AGACAGCAGTAAATGCAGACTGGTCAAGGACAGCTCAATGAAATCAATTATGAAGACCACAAGTTGAAG  
 TCAGGGACTAACCCAAGAAGGCCCTCCAGGCAGTGTACAGCATGATGAGCTGGCCAGATGACGTCCCTC  
 CTGAAGGCTGGAACCGCACCCGCCATGTCATCATCCTCATGACTGATGGATTGCACAACATGGCGGGGA  
 CCCAATTAAGTGTATTGATGAGATCCGGGACTTGCATATACATTGGCAAGGATCGCAAAAACCAAGGGAG  
 GATTATCTGGATGCTATGTGTTGGGGTGGCCCTTTGGTGAACCAAGTGAACATCAATGCTTTGGCTT  
 CCAAGAAAGACAATGAGCAACATGTGTTCAAAGTCAAGGATATGGAAAACCTGGAAGATGTTTTCTACCA  
 AATGATCGATGAAAGCCAGTCTCTGAGTCTCTGTGGCATGGTTTGGGAACACAGGAAGGGTACCGATTAC  
 CACAAGCAACCATGGCAGGCCAAGATCTCAGTCATTCGCCCTTCAAAGGGACACGAGAGCTGTATGGGGG  
 CTGTGGTGTCTGAGTACTTTGTGCTGACAGCAGCACATTGTTTCACTGTGGATGACAAGGAACACTCAAT  
 CAAGGTCAGCGTAGGAGGGGAGAAGCGGGACCTGGAGATAGAAGTAGTCCTATTTACCCCCAACAAC  
 ATTAATGGGAAAAAGAAGCAGGAATTCCTGAATTTTATGACTATGACGTTGCCCTGATCAAGCTCAAGA  
 ATAAGCTGAAATATGGCCAGACTATCAGGCCATTTGTCTCCCTGCACCGAGGGAACAACCTCGAGCTTT  
 GAGGCTTCTCCTCAACTACCACTTCCAGCAACAAAAGGAAGAGCTGCTCCCTGCACAGGATATCAAAGCT  
 CTGTTTGTGTCTGAGGAGGAGAAAAAGTACTCGGAAGGAGGTCTACATCAAGAATGGGGATAAGAAAAG  
 GCAGCTGTGAGAGAGATGCTCAATATGCCCCAGGCTATGACAAAGTCAAGGACATCTCAGAGGTGGTAC  
 CCCTCGGTTCTTTGACTGGAGGAGTGTCCCTATGCTGACCCCAATACTTGCAGAGGTGATTCTGGC  
 GGCCCCCTTGATAGTTCACAAGAGAAGTCGTTTCATTCAAGTTGGTGAATCAGCTGGGGAGTAGTGGATG  
 TCTGCAAAAACCAAGCGGCAAAAGCAGGTACCTGCTCAGCCCCGAGACTTTCACATCAACCTCTTTCA  
 AGTGCTGCCCTGGCTGAAGGAGAACTCCAAGATGAGGATTTGGGTTTTCTA

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >RG200499 representing NM\_001710  
 Red=Cloning site Green=Tags(s)

MGSNLSPQLCLMPFILGLLSGGVTTTPWSLAWPQGSCSLEGVEIKGGSFRLQEGQALEYVCPSPGFYPYP  
 VQTRTCRSTGWSSTLKTQDKTVRKAECRAIHCRPHDFENGEYWPRSPYNNVSDEISFHCYDGYTLRGS  
 ANRTCQVNGRWSGQTAICDNGAGYCSNPGIPIGTRKVGSIYRLEDSVYHCSRGLTLRGSQRRTCQEGGS  
 WSGTEPSCQDSFMYDTPQEVAAEFLSSLTETIEGVDAEDGHGPGEQQKRKIVLDPSPGSMNIYLVLDGSDS  
 IGASNFTGAKKCLVNLIEKVASYGVKPRYGLVYATYPKIWWKVSEADSSNADWVTKQLNEINYEDHKLK  
 SGTNTKKALQAVYSMMSWPDDVPPEGWNRRHVIILMTDGLHNMGGDPITVIDEIRDLLYIGKDRKNPRE  
 DYLDVYVFGVGPLVNQVINALASKKDNEQHVFKVKDMENLEDVFYQMIDESQSLSLCGMVWEHRKGTDY  
 HKQPWQAKISVIRPSKGHESCMGAVVSEYFVLTAHCFTVDDKEHSIKVSVGGEKRDLEIEVVLFHPNYN  
 INGKKEAGIPEFYDYDVALIKLKNKLKYGTIRPICLPCTEGTTRALRLPPTTTCQQQKEELLPAQDIKA  
 LRVSEEEKLTRKEVYIKNGDKKGCERDAQYAPGYDKVKDISEVVTPRFLCTGGVSPYADPNTCRGDSG  
 GPLIVHKRSRFIQVGVISWGVVDVCKNQKRQKQVPAHARDFHINLFQVLPWLKEKLQDEDLGFL

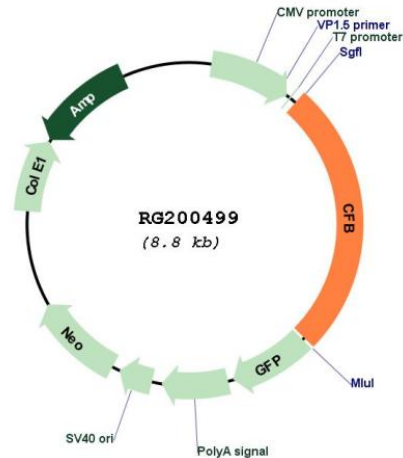
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**Plasmid Map:**


**ACCN:** NM\_001710

**ORF Size:** 2292 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\\_001710.4](#), [NP\\_001701.2](#)

**RefSeq Size:** 2574 bp

**RefSeq ORF:** 2295 bp

**Locus ID:** 629

UniProt ID:	<a href="#">P00751</a>
Cytogenetics:	6p21.33
Domains:	CCP, Tryp_SPc, VWA
Protein Families:	Druggable Genome, Protease, Secreted Protein
Protein Pathways:	Complement and coagulation cascades
Gene Summary:	<p>This gene encodes complement factor B, a component of the alternative pathway of complement activation. Factor B circulates in the blood as a single chain polypeptide. Upon activation of the alternative pathway, it is cleaved by complement factor D yielding the noncatalytic chain Ba and the catalytic subunit Bb. The active subunit Bb is a serine protease which associates with C3b to form the alternative pathway C3 convertase. Bb is involved in the proliferation of preactivated B lymphocytes, while Ba inhibits their proliferation. This gene localizes to the major histocompatibility complex (MHC) class III region on chromosome 6. This cluster includes several genes involved in regulation of the immune reaction. Polymorphisms in this gene are associated with a reduced risk of age-related macular degeneration. The polyadenylation site of this gene is 421 bp from the 5' end of the gene for complement component 2. [provided by RefSeq, Jul 2008]</p>