# Active Recombinant Human CFB Protein, His&Avi tagged, Biotinylated

**Cat. No.** CFB-11192H **Lot. No.** (See product label)

## SPECIFICATION

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| **Product Overview** | Biotinylated Human Complement Factor B Protein, His, Avi tag is expressed from human 293 cells (HEK293). It contains AA Thr 26-Leu 764 (Accession # P00751-1). This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag. Predicted N-terminus: Thr 26 |
| **Species** | Human |
| **Source** | HEK293 |
| **ProteinLength** | 26-764 aa |
| **Conjugation/Label** | Biotin |
| **Description** | Complement factor B, a component of the alternative pathway (AP) of complement activation. Factor B is one of the upstream, proximal components unique to the AP and is essential for the activation of the pathway. It is an integral component that drives the amplification loop. It is cleaved by factor D into 2 fragments: Ba and Bb. Bb, a serine protease, then combines with complement factor 3b to generate the C3 or C5 convertase. It has also been implicated in proliferation and differentiation of preactivated B-lymphocytes, rapid spreading of peripheral blood monocytes, stimulation of lymphocyte blastogenesis and lysis of erythrocytes. Ba inhibits the proliferation of preactivated B-lymphocytes. |
| **Form** | Lyophilized from 0.22 |

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| | μm filtered solution in PBS, pH7.4 with trehalose as protectant. |
| **Specificity** | Protein Ratio: Passed as determined by the HABA assay/binding ELISA. |
| **Bio-activity** | Biotinylated Human Complement Factor B Protein, His, Avi tag immobilized on CM5 Chip can bind Iptacopan (LNP023) with an affinity constant of 22.9 nM as determined in a SPR assay. |
| **Molecular Mass** | The protein has a calculated MW of 86.6 kDa. The protein migrates as 100-115 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation. |
| **Purity** | >95% as determined by SDS-PAGE. >90% as determined by SEC-MALS. |
| **Storage** | This product is stable after storage at: -20 to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution. For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles. |
| **Reconstitution** | It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 μg/μL. Centrifuge the vial at 4 centigrade before opening to recover the entire contents. |

## GENE INFORMATION

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| **Gene Name** | CFB complement factor B [ Homo sapiens (human) ] |
| **Official Symbol** | CFB |
| **Synonyms** | CFB; complement factor B; B factor, properdin, BF, BFD; H2 Bf; C3 proactivator; C3/C5 convertase; C3 proaccelerator; properdin factor B; B-factor, properdin; glycine- |

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| | rich beta glycoprotein; glycine-rich beta-glycoprotein; BF; FB; BFD; GBG; CFAB; PBF2; AHUS4; FBI12; H2-Bf; FLJ54899; |
| **Gene ID** | 629 |
| **mRNA Refseq** | NM_001710 |
| **Protein Refseq** | NP_001701 |
| **MIM** | 138470 |
| **UniProt ID** | P00751 |

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