



Recombinant Human Complement Component 4 Binding Protein, beta Datasheet

Catalog Number: PR27270

Product Type: Recombinant Protein

Source: E. Coli

Amino Acid Sequence: MGSSHHHHHH SGLVPRGSH MGSHMSDAEH CPELPPVDNS IFVAKEVEGQ ILGTYVCIKG YHLVGKKTLE CNASKEDWNT TTECRLGHCP DPVLVNGEFS SSGPVNVSDK ITFMCNDHYI LKGSNRSQCL EDHTWAPPFP ICKSRDCDPP GNPVHG YFEG NNFTLGSTIS YYCEDRYLV GVQEQQCVDG EWSSALPVCK LIQEAPKPEC EKALLAFQES KNLCEAMENF MQLKESGMT MEELKYSLEL KKAELKAKLL.

Description/Molecular Mass: Complement Component 4 Binding Protein, Beta (C4BPB) belongs to a superfamily of proteins composed primarily of tandemly arrayed short consensus repeats of approximately 60 amino acids. C4BPB has a regulatory role in the coagulation system also, mediated via the beta-chain binding of protein S, a vitamin K-dependent protein which functions as a cofactor of activated protein C. A single, unique beta-chain of the C4BPB assembles with 7 identical alpha-chains into the principal isoform of C4BPB, which is a multimeric protein that controls activation of the complement cascade via the classical pathway. C4BPB binds as a cofactor to C3b/C4b inactivator (C3bIINA), which subsequently hydrolyzes the complement fragment C4b. In addition, C4BPB accelerates the degradation of the C4bC2a complex (C3 convertase) by detaching the complement fragment C2a. Furthermore, C4BPB interacts with anticoagulant protein S and with serum amyloid P component.

C4BPB Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 260 amino acids (18-252 a.a) and having a molecular mass of 29kDa. C4BPB is fused to a 25 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

Purity: Greater than 90.0% as determined by:
(a) Analysis by SDS-PAGE.

Format: C4BPB protein solution (1mg/ml) containing 20mM Tris-HCl buffer (pH8.0) and 10% glycerol and 0.15M NaCl.

Storage: Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

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