

Product datasheet for **SC300397**

Complement C4B (C4B) (NM_001002029) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Complement C4B (C4B) (NM_001002029) Human Untagged Clone
Tag:	Tag Free
Symbol:	C4B
Synonyms:	C4B1; C4B2; C4B3; C4B5; C4B12; C4BD; C4B_2; C4F; CH; CO4; CPAMD3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC300397 representing NM_001002029. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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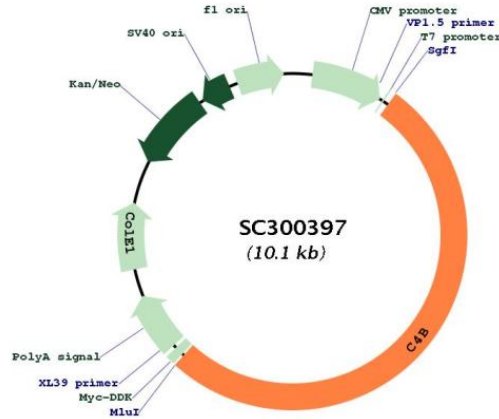
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Restriction Sites:

Sgfl-MluI

Plasmid Map:



ACCN: NM_001002029

Insert Size: 5235 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001002029.3](#)

RefSeq Size: 5444 bp

RefSeq ORF: 5235 bp

Locus ID: 721

UniProt ID: [P0C0L4](#)

Cytogenetics: 6p21.33

Protein Pathways: Complement and coagulation cascades, Systemic lupus erythematosus

MW: 192.8 kDa

Gene Summary: This gene encodes the basic form of complement factor 4, and together with the C4A gene, is part of the classical activation pathway. The protein is expressed as a single chain precursor which is proteolytically cleaved into a trimer of alpha, beta, and gamma chains prior to secretion. The trimer provides a surface for interaction between the antigen-antibody complex and other complement components. The alpha chain may be cleaved to release C4 anaphylatoxin, a mediator of local inflammation. Deficiency of this protein is associated with systemic lupus erythematosus. This gene localizes to the major histocompatibility complex (MHC) class III region on chromosome 6. Varying haplotypes of this gene cluster exist, such that individuals may have 1, 2, or 3 copies of this gene. In addition, this gene exists as a long form and a short form due to the presence or absence of a 6.4 kb endogenous HERV-K retrovirus in intron 9. [provided by RefSeq, May 2020]