

Product datasheet for SC303061

Complement C5 (C5) (NM_001735) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Complement C5 (C5) (NM_001735) Human Untagged Clone
Tag:	Tag Free
Symbol:	C5
Synonyms:	C5a; C5b; C5D; CPAMD4; ECLZB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC303061 representing NM_001735. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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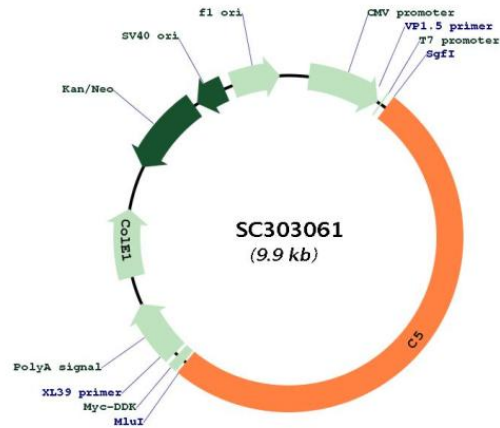
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Restriction Sites:

SgfI-MluI

Plasmid Map:



ACCN: NM_001735

Insert Size: 5031 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_001735.2](#)

RefSeq Size: 5480 bp

RefSeq ORF: 5031 bp

Locus ID: 727

UniProt ID:	P01031
Cytogenetics:	9q33.2
Protein Families:	Druggable Genome
Protein Pathways:	Complement and coagulation cascades, Prion diseases, Systemic lupus erythematosus
MW:	188.3 kDa
Gene Summary:	<p>This gene encodes a component of the complement system, a part of the innate immune system that plays an important role in inflammation, host homeostasis, and host defense against pathogens. The encoded preproprotein is proteolytically processed to generate multiple protein products, including the C5 alpha chain, C5 beta chain, C5a anaphylatoxin and C5b. The C5 protein is comprised of the C5 alpha and beta chains, which are linked by a disulfide bridge. Cleavage of the alpha chain by a convertase enzyme results in the formation of the C5a anaphylatoxin, which possesses potent spasmogenic and chemotactic activity, and the C5b macromolecular cleavage product, a subunit of the membrane attack complex (MAC). Mutations in this gene cause complement component 5 deficiency, a disease characterized by recurrent bacterial infections. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2015]</p> <p>Transcript Variant: This variant (1) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation at an alternate start site compared to variant 2. The encoded isoform (1) has a shorter and unique N-terminus compared to isoform 2.</p>