

Product datasheet for RC218821

Complement C5 (C5) (NM_001735) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Complement C5 (C5) (NM_001735) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Complement C5
Synonyms:	C5a; C5b; C5D; CPAMD4; ECLZB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218821 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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Protein Sequence:

>RC218821 protein sequence
Red=Cloning site Green=Tags(s)

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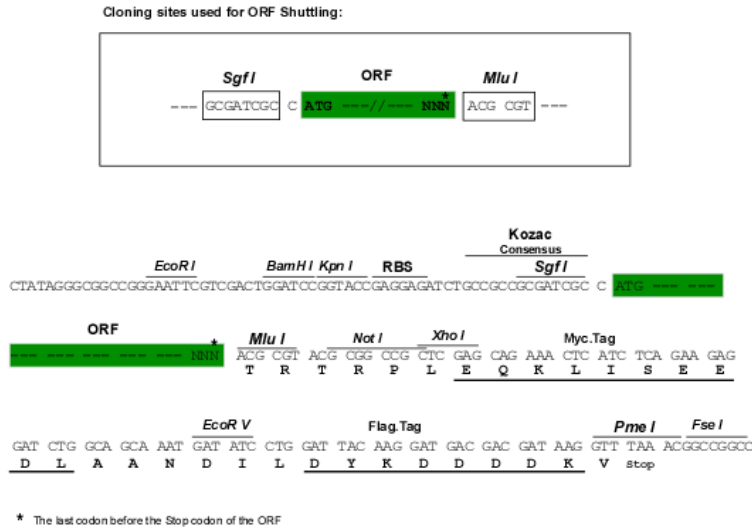
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Chromatograms:

https://cdn.origene.com/chromatograms/mk6607_c01.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001735

ORF Size: 5028 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_001735.3](#)

RefSeq Size: 5480 bp

RefSeq ORF: 5031 bp

Locus ID: 727

UniProt ID: [P01031](#)

Cytogenetics: 9q33.2

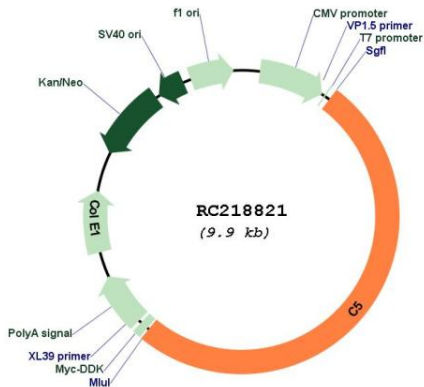
Protein Families: Druggable Genome

Protein Pathways: Complement and coagulation cascades, Prion diseases, Systemic lupus erythematosus

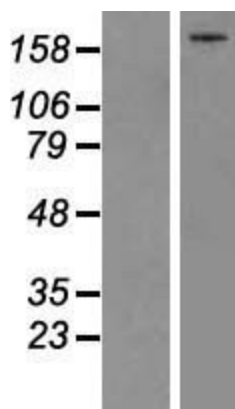
MW: 188.3 kDa

Gene Summary: 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]

Product images:



Circular map for RC218821



Western blot validation of overexpression lysate (Cat# [LY419776]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218821 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).