

## Product datasheet for **RG218821**

### 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:	TurboGFP
Symbol:	Complement C5
Synonyms:	C5a; C5b; C5D; CPAMD4; ECLZB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG218821 representing NM_001735 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

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TCATTTTCAGCACAAAAATATCCCGTGTGGAGCATCTGAAAATATTGTGATTCAAGTTTATGGATACAC  
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG218821 representing NM\_001735  
 Red=Cloning site Green=Tags(s)

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 VLNLPSGVTVLEFNVKTDAPDLPEENQAREGYRAIAYSSLQS SYLYIDWTDNHKALLVGEHLNIIIVTPKS  
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 DFLCVRFRIFELFEVGF LSPATFTVYEHYRDPKQCTMFYSTSNIKI QKVCGAACKC VEAADCGMQEELD  
 LTISAETR KQTACKPEIAYAYKVSITSITVENFVKYKATLLDIYKTGEAVA EKDSEITFIKKVCTNAE  
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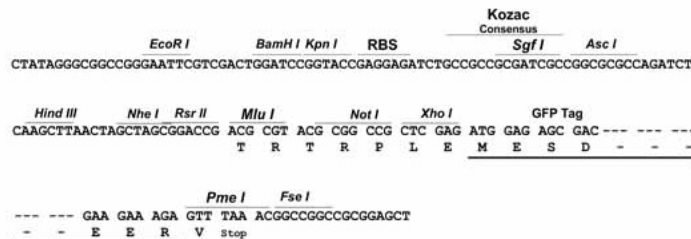
TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:

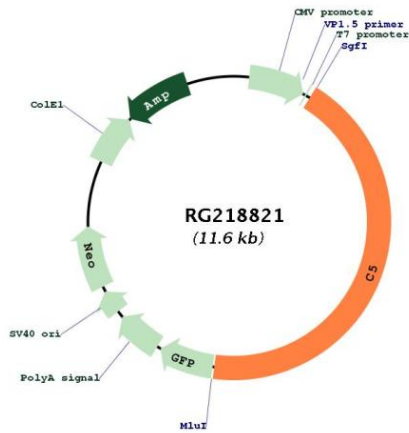


ACCN:

NM\_001735

<b>ORF Size:</b>	5028 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001735.2</a> , <a href="#">NP_001726.2</a>
<b>RefSeq Size:</b>	5480 bp
<b>RefSeq ORF:</b>	5031 bp
<b>Locus ID:</b>	727
<b>UniProt ID:</b>	<a href="#">P01031</a>
<b>Cytogenetics:</b>	9q33.2
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Complement and coagulation cascades, Prion diseases, Systemic lupus erythematosus
<b>Gene Summary:</b>	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 RG218821