

Product datasheet for **SC308721**

Complement C3 (C3) (NM_000064) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Complement C3 (C3) (NM_000064) Human Untagged Clone
Tag: Tag Free
Symbol: Complement C3
Synonyms: AHUS5; ARMD9; ASP; C3a; C3b; CPAMD1; HEL-S-62p
Mammalian Cell Selection: None
Vector: pCMV6-XL6
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_000064 edited
 CTCTGTCCCTCTGTCCCTCTGACCCTGCACTGTCCCAGCACCATGGGACCCACCTCAGGT
 CCCAGCCTGTGCTCCTGCTACTAACCACCTCCCCTGGCTCTGGGGAGTCCCATGTAC
 TCTATCATCACCCCAACATCTTGCGGCTGGAGAGCGAGGAGACCATGGTGCTGGAGGCC
 CACGACGCGCAAGGGGATGTTCCAGTCACTGTTACTGTCCACGACTTCCCAGGCAAAAAA
 CTAGTGCTGTCCAGTGAGAAGACTGTGCTGACCCTGCCACCAACCACATGGGCAACGTC
 ACCTTCACGATCCCAGCCAACAGGGAGTTCAAGTCAGAAAAGGGGCGCAACAAGTTCGTG
 ACCGTGCAGGCCACCTTCGTGACCCAAGTGGTGGAGAAGGTGGTCTGGTCAGCCTGCAG
 AGCGGGTACCTTTCATCCAGACAGACAAGACCATCTACACCCCTGGCTCCACAGTTCTC
 TATCGGATCTTCACCGTCAACCACAAGCTGCTACCCGTGGGCCGACGGTCATGGTCAAC
 ATTGAGAACC CGAAGGCATCCCGGTCAAGCAGGACTCCTTGCTTCTCAGAACCAGCTT
 GCGTCTTGCCCTTGCTTGGGACATTCCGGAACTCGTCAACATGGGCCAGTGGAAGATC
 CGAGCCTACTATGAAAACCTACCACAGCAGGTCTTCTCCACTGAGTTTGAGGTGAAGGAG
 TACGTGCTGCCAGTTTCGAGGTCATAGTGGAGCCTACAGAGAAATTCTACTACATCTAT
 AACGAGAAGGGCCTGGAGGTCACCATCACCGCCAGGTTCTCTACGGGAAGAAAGTGGAG
 GGAAGTGCCTTTGTATCTTCGGGATCCAGGATGGCGAACAGAGGATTTCCCTGCCTGAA
 TCCCTCAAGCGCATTCCGATTGAGGATGGCTCGGGGGAGGTTGTGCTGAGCCGGAAGGTA
 CTGCTGGACGGGTGCAGAACCCCGAGCAGAAGACCTGGTGGGGAAGTCTTTGTACGTG
 TCTGCCACCGTCATCTTGCACTCAGGCAGTGACATGGTGCAGGCAGAGCGCAGCGGGATC
 CCCATCGTGACCTCTCCCTACCAGATCCACTTCAACCAAGACACCCAAGTACTTCAAACCA
 GGAATGCCCTTTGACCTCATGGTTCGTGACGAACCCTGATGGCTCTCCAGCCTACCGA
 GTCCCCGTGGCAGTCCAGGGCGAGGACTGTGCACTCTAACCAGGGAGATGGCGTG
 GCCAAACTCAGCATCAACACACACCCCGCCAGCAAGCCCTTGAGCATCACGGTGCACAG
 AAGAAGCAGGAGCTCTCGGAGGCAGAGCAGGCTACCAGGACCATGCAGGCTCTGCCCTAC
 AGCACCGTGGGCAACTCCAACAATTACCTGCATCTCTCAGTGCTACGTACAGAGCTCAGA
 CCCGGGGAGACCCTCAACGTCAACTTCTCCTGCGAATGGACCGGCCACGAGGCCAAG
 ATCCGCTACTACCTACCTGATCATGAACAAGGGCAGGCTGTTGAAGGCGGACGCCAG



[View online »](#)

GTGCGAGAGCCCGGCCAGGACCTGGTGGTGTGCCCTGTCCATCACCACCGACTTCATC
 CCTTCCTCCGCCTGGTGGCGTACTACACGCTGATCGGTGCCAGCGGCCAGAGGGAGGTG
 GTGGCCGACTCCGTGTGGGTGGACGTCAAGGACTCCTGCGTGGGCTCGCTGGTGGTAAAA
 AGCGGCCAGTCAGAAGACCGGCAGCCTGTACCTGGGCAGCAGATGACCCTGAAGATAGAG
 GGTGACCACGGGGCCCGGTGGTACTGGTGGCCGTGGACAAGGGCGTGTTCGTGCTGAAT
 AAGAAGAACAACTGACGCAGAGTAAGATCTGGGACGTGGTGGAGAAGGCAGACATCGGC
 TGCACCCCGGGCAGTGGGAAGGATTACGCCGGTGTCTTCCGACGCAGGGCTGACCTTC
 ACGAGCAGCAGTGGCCAGCAGACCGCCAGAGGGCAGAATTTCAGTGCCCGCAGCCAGCC
 GCCCGCCGACGCCGTTCCGTGCAGCTCACGGAGAAGCGAATGGACAAAAGTCGGCAAGTAC
 CCCAAGGAGTGCGAAGTGTGCGAGGACGGCATGCGGGAGAACCCCATGAGGTTCTCG
 TGCCAGCGCCGGACCCGTTTCATCTCCCTGGGCGAGGCGTGAAGAAGGTCTTCTGGAC
 TGCTGCAACTACATCACAGAGCTGCGGCGGCAGCACGCGGGGCCAGCCACTGGGCCTG
 GCCAGGAGTAACCTGGATGAGGACATCATTGCAGAAGAGAACATCGTTTCCCGAAGTGAG
 TTCCAGAGAGCTGGCTGTGGAACGTTGAGGACTTGAAAGAGCCACCGAAAAATGGAATC
 TCTACGAAGCTCATGAATATATTTTTGAAAGACTCCATCACCACGTGGGAGATTCTGGCT
 GTGAGCATGTCCGACAAGAAAGGATCTGTGTGGCAGACCCTTCGAGGTCACAGTAATG
 CAGGACTTCTTACGACCTGCGGCTACCCTACTCTGTTGTTTCAAACGAGCAGGTGGAA
 ATCCGAGCCGTTCTTACAATTACCGGCAGAACCAAGAGCTCAAGGTGAGGGTGGAACTA
 CTCCACAATCCAGCCTTCTGCAGCCTGGCCACCACCAAGAGGCGTACCAGCAGACCGTA
 ACCATCCCCCAAGTCTCGTTGTCCGTTCCATATGTCATCGTGCCGCTAAAGACCGGC
 CTGCAGGAAGTGAAGTCAAGGCTGCTGTCTACCATCATTTTCATCAGTGACGGTGTGAGG
 AAGTCCCTGAAGTGTGCCGGAAGGAATCAGAATGAACAAAACGTGGTGTTCGCACC
 CTGGATCCAGAACGCCTGGGCCGTGAAGGAGTGCAGAAAGAGGACATCCCACTGCAGAC
 CTCAGTGACCAAGTCCCGACACCGAGTCTGAGACCAGAATTCTCTGCAAGGGACCCCA
 GTGGCCAGATGACAGAGGATGCCGTGACGCGGAACGGCTGAAGCACCTCATTGTGACC
 CCCTCGGGCTGCGGGGAACAGAATGATCGGCATGACGCCACGGTCATCGCTGTGCAT
 TACCTGGATGAAACGGAGCAGTGGGAGAAGTTCGGCCTAGAGAAGCGGCAGGGGGCCTTG
 GAGCTCATCAAGAAGGGGTACACCCAGCAGCTGGCCTCAGACAACCCAGCTCTGCCTTT
 GCGGCCTTCGTGAAACGGGCACCCAGCACCTGGCTGACCCGCTACGTGGTCAAGGTCTTC
 TCTCTGGCTGTCAACCTCATCGCCATCGACTCCCAAGTCTCTGCGGGGTGTAAATGG
 CTGATCCTGGAGAAGCAGAAGCCGACGGGTCTTCCAGGAGGATGCGCCCGTGATACAC
 CAAGAAATGATTGGTGGATTACGGAACAACAACGAGAAAGACATGGCCCTCACGGCCTTT
 GTTCTCATCTCGCTGCAGGAGGCTAAAGATATTTGCGAGGAGCAGGTCAACAGCCTGCCA
 GGCAGCATCACTAAAGCAGGAGACTTCCTTGAAGCCAACCTACATGAACCTACAGAGATCC
 TACACTGTGGCCATTGCTGGCTATGCTCTGGCCAGATGGGCAGGCTGAAGGGCCCTCTT
 CTTAACAAATTTCTGACCACAGCCAAAGATAAGAACCCTGGGAGGACCTGGTAAGCAG
 CTCTACAACGTGGAGGCCACATCCTATGCCCTCTTGGCCCTACTGCAGCTAAAAGACTTT
 GACTTTGTGCCTCCCGTGTGCGTTGGCTCAATGAACAGAGATACTACGGTGGTGGCTAT
 GGCTCTACCCAGGCCACCTTCATGGTGTCCAAGCCTTGGCTCAATACCAAAAAGGACGCC
 CCTGACCACAGGAACCTAACCTTGATGTGTCCCTCCAACCTGCCAGCCGACGCTCCAAG
 ATCACCCACCGTATCCACTGGGAATCTGCCAGCCTCCTGCGATCAGAAGAGACCAAGGAA
 AATGAGGGTTTACAGTCAACAGCTGAAGGAAAAGGCCAAGGCACCTTGTGGTGGTGACA
 ATGTACCATGCTAAGGCCAAAGATCAACTCACCTGTAATAAATTCGACCTCAAGGTCAAC
 ATAAAACCAGCACCGGAAACAGAAAAGAGGCTCAGGATGCCAAGAACTATGATCCTT
 GAGATCTGTACCAGGTACCGGGGAGACCAGGATGCCACTATGTCTATATTGGACATATCC
 ATGATGACTGGCTTTGCTCCAGACACAGATGACCTGAAGCAGCTGGCCAATGGTGTGAC
 AGATACATCTCCAAGTATGAGCTGGACAAGCCTTCTCCGATAGGAACACCTCATCATC
 TACCTGGACAAGTCTCACACTCTGAGGATGACTGTCTAGCTTTCAAAGTTCACCAATAC
 TTTAATGTAGAGCTTATCCAGCCTGGAGCAGTCAAGGTCTACGCCTATTACAACCTGGAG
 GAAAGCTGTACCCGGTTCTACCATCCGGAAAAGGAGGATGGAAAGCTGAACAAGCTCTGC
 CGTGATGAACTGTGCCGCTGTGCTGAGGAGAATTGCTTCATACAAAAGTCGGATGACAAG
 GTCACCTGGAAGAACGGCTGGACAAGGCTGTGAGCCAGGAGTGGACTATGTGTACAAG

```

ACCCGACTGGTCAAGGTTGAGCTGTCCAATGACTTTGACGAGTACATCATGGCCATTGAG
CAGACCATCAAGTCAGGCTCGGATGAGGTGCAGGTTGGACAGCAGCGCACGTTTCATCAGC
CCCATCAAGTGCAGAGAAGCCCTGAAGCTGGAGGAGAAGAACTACCTCATGTGGGGT
CTCTCCTCCGATTTCTGGGGAGAGAAGCCCAACCTCAGCTACATCATCGGGAAGGACT
TGGGTGGAGCACTGGCCTGAGGAGGACGAATGCCAAGACGAAGAGAACCAGAAACAATGC
CAGGACCTCGGCGCCTTACCGAGAGCATGGTTGTCTTTGGGTGCCCACTGACCACAC
CCCCATCCCCCACTCCAGATAAAGCTTCAGTTATAAAAAAAAAAAAAAAAAAAAA
  
```

Restriction Sites: Please inquire

ACCN: NM_000064

Insert Size: 5100 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 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_000064.1](#), [NP_000055.1](#)

RefSeq Size: 5067 bp

RefSeq ORF: 4992 bp

Locus ID: 718

UniProt ID: [P01024](#)

Cytogenetics: 19p13.3

Domains:	ANATO, NTR, A2M, A2M_N
Protein Families:	Druggable Genome
Protein Pathways:	Complement and coagulation cascades, Systemic lupus erythematosus
Gene Summary:	<p>Complement component C3 plays a central role in the activation of complement system. Its activation is required for both classical and alternative complement activation pathways. The encoded preproprotein is proteolytically processed to generate alpha and beta subunits that form the mature protein, which is then further processed to generate numerous peptide products. The C3a peptide, also known as the C3a anaphylatoxin, modulates inflammation and possesses antimicrobial activity. Mutations in this gene are associated with atypical hemolytic uremic syndrome and age-related macular degeneration in human patients. [provided by RefSeq, Nov 2015]</p>