

Product datasheet for **SC308746**

Complement C4A (C4A) (NM_007293) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Complement C4A (C4A) (NM_007293) Human Untagged Clone
Tag:	Tag Free
Symbol:	C4A
Synonyms:	C4; C4A2; C4A3; C4A4; C4A6; C4AD; C4S; CO4; CPAMD2; RG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC308746 representing NM_007293. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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Restriction Sites:	Sgfl-Mlul
Plasmid Map:	<input type="checkbox"/>
ACCN:	NM_007293
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:	<ol style="list-style-type: none"> 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_007293.2
RefSeq Size:	5426 bp
RefSeq ORF:	5235 bp
Locus ID:	720
UniProt ID:	P0C0L4
Cytogenetics:	6p21.33
Domains:	ANATO, NTR, A2M, A2M_N
Protein Pathways:	Complement and coagulation cascades, Systemic lupus erythematosus
MW:	192.8 kDa

Gene Summary:

This gene encodes the acidic form of complement factor 4, 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 is cleaved to release C4 anaphylatoxin, an antimicrobial peptide and a mediator of local inflammation. Deficiency of this protein is associated with systemic lupus erythematosus and type I diabetes mellitus. 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. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2014]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1). Sequence Note: This RefSeq record represents the C4A*001.1.1 allele.