

## Product datasheet for **RC219942**

### Complement factor 8 beta (C8B) (NM\_000066) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Complement factor 8 beta (C8B) (NM_000066) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Complement factor 8 beta
Synonyms:	C82
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC219942 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAAGAATCCAGGACATGGGCTTGGAGGGCGCCGGTGGAGCTATTTCTCTCTGTGCTGCCCTGGGCT  
 GTCTCAGTTTGCCTGGCTCCAGAGGTGAAAGGCCACATTCCTTTGGGTCAAATGCAGTCAACAAGAGCTT  
 TGCTAAGAGCAGACAGATGCGGAGTGTGGATGTTACCCTGATGCCATTGATTGTGAGCTGTCTAGTTGG  
 TCCTCTTGGACCACATGTGACCCCTGTGAGAAGAAAAGGTACAGGTATGCCTACTTGCTCCAGCCCTCTC  
 AGTTCCATGGGGAACCGTCAACTTCTCTGACAAGGAAGTCAAGACTGTGTTACCAACAGACCATGCAG  
 AAGTCAAGTGGATGTGAAGGCTTGTGTGTGCACAGACAGGAAGGTGTGTAACCCGAGACTTCTTTGC  
 AATGGGGACAATGACTGTGGAGACCAGTCAAGTGAAGCAAAGTGTAGAAGGATTTATAAAAAATGCAGC  
 ATGAAATGGACCAATACTGGGGAATTGGCAGTCTGGCCAGTGGGATAAATTTGTTCAACAACAGTTTGA  
 GGGCCAGTTCTTGATCACAGGTATTATGCAGGTGGATGCTCCCGCATTACATCCTGAACACGAGGTTT  
 AGGAAGCCCTACAATGTGAAAGCTACACGCCACAGACCAAGGCAAATACGAATTCATATTTAAAGAGT  
 ATGAATCATACTCAGATTTTGAACGCAATGTCACAGAGAAAATGGCAAGCAAGTCTGGTTTCAGTTTGG  
 TTTTAAATACCTGGAATATTTGAACTTGGCATCAGTAGTCAAAGTATCGAGGCAAACTATATTAGG  
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 GGGGGCATTATGAATACACCCCTCGTTATGAACAAAGAGGCCATGGAGAGAGGAGATTACTCTTAACA  
 ACGTCCATGCCTGTGCCAAAAATGATTTTAAAAATGGTGGTGCCATTGAAGAGGTCTACGTCAGTCTGGG  
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 GAGGACTTGGTGGTCTGGTACGAGGAGGGCAAGTGAAGCACATCACACCCTGGCATACAGGAGCTGC  
 CGACGGCGGACCTGATGCAGGAGTGGGAGACGCTGTGCAGTACAACCCAGCCATCATCAAAGTTAAGGT  
 GGAGCCTCTGTATGAACTAGTGACAGCCACAGATTTTGCCTATTCAGCACAGTGAAGGAGAACATGAAG  
 CAGGCACTGGAGGAGTTCAGAAGGAAGTTAGTTCCTGCCACTGTGCTCCCTGCCAAGGAAATGGAGTCC  
 CTGTCTGAAAGGATCACGCTGTGACTGCATCTGTCTGTTGGATCCCAAGGCCTAGCCTGTGAGGTCTC  
 CTATCGGAAGAATACCCCATGATGGGAAGTGAATTGCTGGTCAAATGGTCTTCATGCTCTGGAAGA  
 CGTAAGACAAGACAAAGGCAGTGAACAATCCACCTCCTCAAAATGGGGGTAGCCCTGTTCAGGCCCTG  
 CTTCAGAAACACTTGACTGCTCC

**ACGCGT**ACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC219942 protein sequence  
 Red=Cloning site Green=Tags(s)

MKNSRTWAWRAPVELFLLCAALGCLSLPGSRGERPHSFGSNAVNKSF AKSRQMRSVDVTLMPIDCELSW  
 SSWTTCDCPCQKKRYRYAYLLQPSQFHGEP CNFSDKEVEDCVTNRPCRSQVRCEGFVCAQTGRCVNRLLC  
 NGDNDCGDQSDEANCRRIYKKCQHEMDQYWGIGSLASGINLFTNSFEGPVL DHRYYAGGCSPHYILNTRF  
 RKPYNVESYTPQTQGYEFILKEYESYDFERNVTEKMASKSGFSFGFKIPGIFELGISSQSDRGKHYIR  
 RTKRF SHTKSVFLHARSDLEVAHYK LKPRSLMLHYEFLQRVKR LPLEYSYGEYRDLFRDFGTHYITEAVL  
 GGIYEYTLVMNKEAMERGDYTLN NVHACAKNDFKIGGAIIEVYVSLGVS VGKCRGILNEIKDRNKRDTMV  
 EDLVVLVRGGASEHITTLAYQELPTADLMQEWGDAVQYNPAIIKVKVEPLYELVTATDFAYSSTVRQNMK  
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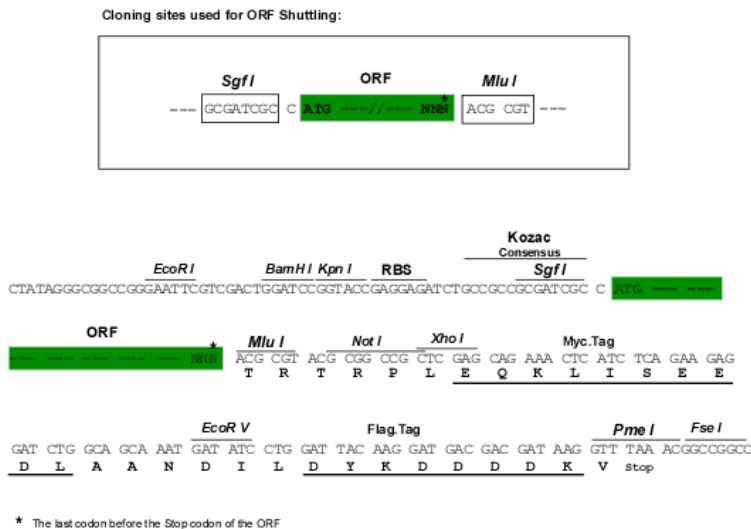
**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6606\\_a11.zip](https://cdn.origene.com/chromatograms/mk6606_a11.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_000066

ORF Size: 1773 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\\_000066.3](#)

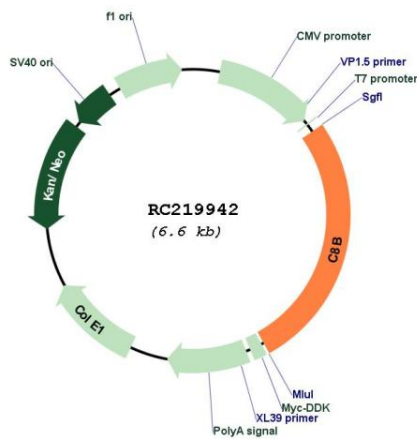
RefSeq Size: 2178 bp

RefSeq ORF: 1776 bp

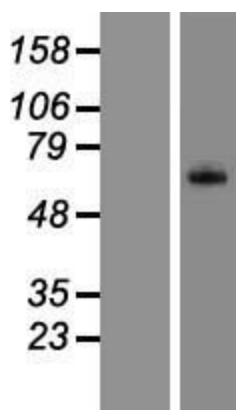
Locus ID: 732

<b>UniProt ID:</b>	<u>P07358</u>
<b>Cytogenetics:</b>	1p32.2
<b>Domains:</b>	tsp_1, MACPF, ldl_recept_a
<b>Protein Families:</b>	Druggable Genome, Secreted Protein, Transmembrane
<b>Protein Pathways:</b>	Complement and coagulation cascades, Prion diseases, Systemic lupus erythematosus
<b>MW:</b>	67 kDa
<b>Gene Summary:</b>	This gene encodes one of the three subunits of the complement component 8 (C8) protein. C8 is composed of equimolar amounts of alpha, beta and gamma subunits, which are encoded by three separate genes. C8 is one component of the membrane attack complex, which mediates cell lysis, and it initiates membrane penetration of the complex. This protein mediates the interaction of C8 with the C5b-7 membrane attack complex precursor. In humans deficiency of this protein is associated with increased risk of meningococcal infections. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2013]

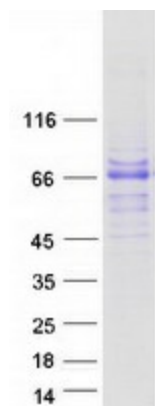
**Product images:**



Circular map for RC219942



Western blot validation of overexpression lysate (Cat# [LY424942]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219942 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified C8B protein (Cat# [TP319942]). The protein was produced from HEK293T cells transfected with C8B cDNA clone (Cat# RC219942) using MegaTran 2.0 (Cat# [TT210002]).