

## Product datasheet for **RC218343**

### CD59 (NM\_000611) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CD59 (NM_000611) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CD59
Synonyms:	1F5; 16.3A5; EJ16; EJ30; EL32; G344; HRF-20; HRF20; MAC-IP; MACIF; MEM43; MIC11; MIN1; MIN2; MIN3; MIRL; MSK21; p18-20
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218343 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGAATCCAAGGAGGTCTGTCTGTTCTGGGCTGCTGCTCGTCTGGTGTCTTCTGCCATTCAGGTC  
ATAGCCTGCAGTGTACAACCTGCTCAACCAACTGCTGACTGCAAAACAGCCGTCAATTGTTTCATCTGA  
TTTTGATGCGTGTCTCATTACCAAAGCTGGGTTACAAGTGATAACAAGTGTGGAAGTTTGAGCATTGC  
AATTTCAACGACGTCACAACCCGCTTGAGGAAAATGAGCTAACGTAAGTACTGCTGCAAGAAGGACCTGT  
GTAACCTTAACGAACAGCTTAAAATGGTGGGACATCCTATCAGAGAAAACAGTTCTTCTGCTGGTGAC  
TCCATTTCTGGCAGCAGCCTGGAGCCTTCATCCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC218343 protein sequence Red=Cloning site Green=Tags(s)
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MGIQGGSVLFGLLLVLAVFCHSGHSLQYNCNPNTADCKTAVNCSSDFDACLITKAGLQVYNKCKWFEHC  
NFNDVTRLRENELTYCCKKDLNCFNEQLENGGTSLEKTVLLLLVTPFLAAAWSLHP

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Chromatograms: [https://cdn.origene.com/chromatograms/mk6417\\_h05.zip](https://cdn.origene.com/chromatograms/mk6417_h05.zip)

Restriction Sites: SgfI-MluI



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**Cloning Scheme:**


**ACCN:** NM\_000611

**ORF Size:** 384 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_000611.6](#)

**RefSeq Size:** 7635 bp

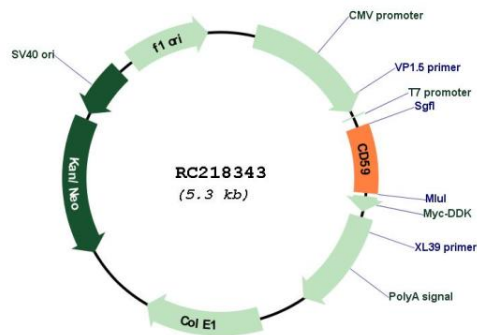
**RefSeq ORF:** 387 bp

**Locus ID:** 966

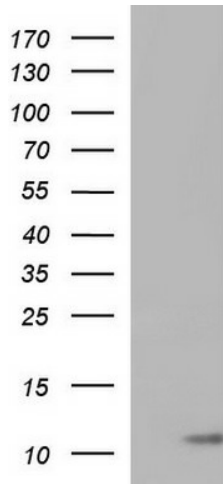
UniProt ID:	<a href="#">P13987</a>
Cytogenetics:	11p13
Domains:	LU
Protein Families:	Druggable Genome
Protein Pathways:	Complement and coagulation cascades, Hematopoietic cell lineage
MW:	14.2 kDa

**Gene Summary:** This gene encodes a cell surface glycoprotein that regulates complement-mediated cell lysis, and it is involved in lymphocyte signal transduction. This protein is a potent inhibitor of the complement membrane attack complex, whereby it binds complement C8 and/or C9 during the assembly of this complex, thereby inhibiting the incorporation of multiple copies of C9 into the complex, which is necessary for osmolytic pore formation. This protein also plays a role in signal transduction pathways in the activation of T cells. Mutations in this gene cause CD59 deficiency, a disease resulting in hemolytic anemia and thrombosis, and which causes cerebral infarction. Multiple alternatively spliced transcript variants, which encode the same protein, have been identified for this gene. [provided by RefSeq, Jul 2008]

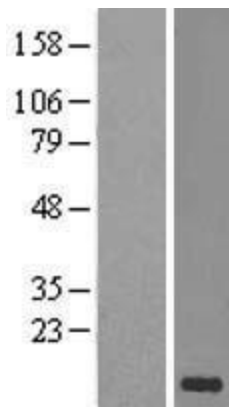
### Product images:



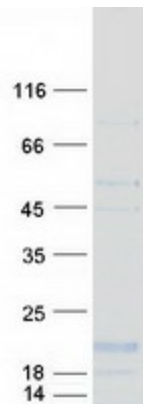
Circular map for RC218343



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CD59 (Cat# RC218343, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CD59 (Cat# [TA507349]). Positive lysates [LY424608] (100ug) and [LC424608] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY426725]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC225085] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CD59 protein (Cat# [TP318343]). The protein was produced from HEK293T cells transfected with CD59 cDNA clone (Cat# RC218343) using MegaTran 2.0 (Cat# [TT210002]).