

Product datasheet for RC225084

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

OriGene Technologies, Inc.

CD59 (NM 001127225) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CD59 (NM_001127225) 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** >RC225084 ORF sequence

Red=Cloning site Blue=ORF Green=Tags(s) Sequence:

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATAGCCTGCAGTGCTACAACTGTCCTAACCCAACTGCTGACTGCAAAACAGCCGTCAATTGTTCATCTGA TTTTGATGCGTGTCTCATTACCAAAGCTGGGTTACAAGTGTATAACAAGTGTTGGAAGTTTGAGCATTGC AATTTCAACGACGTCACAACCCGCTTGAGGGAAAATGAGCTAACGTACTGCTGCAAGAAGGACCTGT GTAACTTTAACGAACAGCTTGAAAATGGTGGGACATCCTTATCAGAGAAAACAGTTCTTCTGCTGGTGAC TCCATTTCTGGCAGCAGCCTGGAGCCTTCATCCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC225084 protein sequence

Red=Cloning site Green=Tags(s)

MGIQGGSVLFGLLLVLAVFCHSGHSLQCYNCPNPTADCKTAVNCSSDFDACLITKAGLQVYNKCWKFEHC

NFNDVTTRLRENELTYYCCKKDLCNFNEQLENGGTSLSEKTVLLLVTPFLAAAWSLHP

TRTRPLEOKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6417 h05.zip

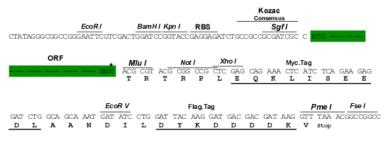
Restriction Sites: Sgfl-Mlul





Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM 001127225

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: <u>NM 001127225.1</u>, <u>NP 001120697.1</u>

RefSeq Size: 7694 bp
RefSeq ORF: 387 bp
Locus ID: 966



UniProt ID: P13987
Cytogenetics: 11p13

Protein Families: Druggable Genome

Protein Pathways: Complement and coagulation cascades, Hematopoietic cell lineage

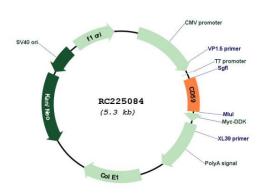
MW: 14.2 kDa

Gene Summary: This gene encodes a cell surface glycoprotein that regulates complement-mediated cell lysis,

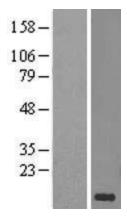
and it is involved in lymphocyte signal transduction. This protein is a potent inhibitor of the complement membrane attack complex, whereby it binds complement C8 and/or C9 during the assembly of this complex, thereby inhibiting the incorporation of multiple copies of C9 into the complex, which is necessary 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 RC225084



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]).