

Product datasheet for **RG218452**

CD59 (NM_203330) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: CD59 (NM_203330) Human Tagged ORF Clone
Tag: TurboGFP
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-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG218452 representing NM_203330
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGAATCCAAGGAGGGTCTGTCTGTTCTGGGCTGCTGCTCGTCTGGTGTCTTCTGCCATTCAGGTC
ATAGCCTGCAGTGTACAACCTGCTAACCCTGCTGACTGCAAAACAGCCGTCAATTGTTTCATCTGA
TTTTGATGCGTGTCTCATTACCAAAGCTGGGTTACAAGTGTATAACAAGTGTGGAAGTTTGAGCATTGC
AATTTCAACGACGTCACAACCCGCTTGAGGAAAATGAGCTAACGTAAGTACTGCTGCAAGAAGGACCTGT
GTAACCTTAACGAACAGCTTAAAATGGTGGGACATCCTATCAGAGAAAACAGTTCTTCTGCTGGTGAC
TCCATTTCTGGCAGCAGCCTGGAGCCTTCATCCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG218452 representing NM_203330
Red=Cloning site Green=Tags(s)
MGIQGGSVLFGLLLVLAVFCHSGHSLQCYNCPNPTADCKTAVNCSSDFDACLITKAGLQVYNKCKWKFHEHC
NFNDVTRLRENELTYCCKKDLNCFNEQLENGGTSLSSEKTVLLLVTPLAAAWSLHP

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



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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 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_203330.2](#)

RefSeq Size: 7794 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

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]