

Product datasheet for RC203179

CD38 (NM_001775) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CD38 (NM_001775) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: CD38

Synonyms: ADPRC 1; ADPRC1

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC203179 ORF sequence

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC203179 protein sequence

Red=Cloning site Green=Tags(s)

MANCEFSPVSGDKPCCRLSRRAQLCLGVSILVLILVVVLAVVVPRWRQQWSGPGTTKRFPETVLARCVKY TEIHPEMRHVDCQSVWDAFKGAFISKHPCNITEEDYQPLMKLGTQTVPCNKILLWSRIKDLAHQFTQVQR DMFTLEDTLLGYLADDLTWCGEFNTSKINYQSCPDWRKDCSNNPVSVFWKTVSRRFAEAACDVVHVMLNG SRSKIFDKNSTFGSVEVHNLQPEKVQTLEAWVIHGGREDSRDLCQDPTIKELESIISKRNIQFSCKNIYR PDKFLQCVKNPEDSSCTSEI

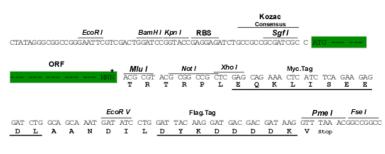
TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Chromatograms: https://cdn.origene.com/chromatograms/mk6078 a05.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_001775

ORF Size: 900 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).

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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 001775.4</u>

RefSeq Size: 1494 bp
RefSeq ORF: 903 bp
Locus ID: 952
UniProt ID: P28907

Cytogenetics: 4p15.32

Domains: Rib_hydrolayse

Protein Families: Cancer stem cells, Druggable Genome, ES Cell Differentiation/IPS, Induced pluripotent stem

cells, Transmembrane

Protein Pathways: Calcium signaling pathway, Hematopoietic cell lineage, Metabolic pathways, Nicotinate and

nicotinamide metabolism

MW: 34.3 kDa

Gene Summary: The protein encoded by this gene is a non-lineage-restricted, type II transmembrane

glycoprotein that synthesizes and hydrolyzes cyclic adenosine 5'-diphosphate-ribose, an intracellular calcium ion mobilizing messenger. The release of soluble protein and the ability

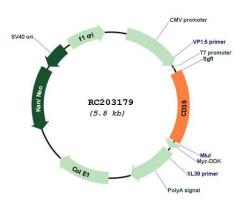
of membrane-bound protein to become internalized indicate both extracellular and

intracellular functions for the protein. This protein has an N-terminal cytoplasmic tail, a single membrane-spanning domain, and a C-terminal extracellular region with four N-glycosylation sites. Crystal structure analysis demonstrates that the functional molecule is a dimer, with the central portion containing the catalytic site. It is used as a prognostic marker for patients with chronic lymphocytic leukemia. Alternative splicing results in multiple transcript variants.

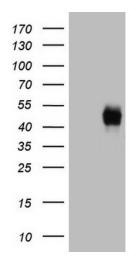
[provided by RefSeg, Sep 2015]



Product images:

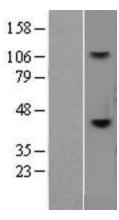


Circular map for RC203179



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CD38 (Cat# RC203179, 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-CD38 (Cat# [TA804538])(1:2000). Positive lysates [LY419752] (100ug) and [LC419752] (20ug) can be purchased separately from OriGene.





Western blot validation of overexpression lysate (Cat# [LY419752]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203179 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).