

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 Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203179 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCAAC TGCAGTTCAGCCCGGTGTCCGGGACAAACCTGCTGCCGGCTCTCTAGGAGAGCCCAAC
TCTGTCTTGGCGTCAGTATCCTGGTCCTGATCCTCGTCGTGGTGTCTCGCGGTGGTCTCCGAGGTGGCG
CCAGCAGTGGAGCGGTCCGGGCACCACCAAGCGCTTCCCGAGACCGTCTGGCGGATGCGTCAAGTAC
ACTGAAATTCATCCTGAGATGAGACATGTAGACTGCCAAAGTGTATGGGATGCTTCAAGGGTGCATTTA
TTTCAAAACATCCTTGCAACATTACTGAAGAAGACTATCAGCCACTAATGAAGTTGGGAACCTCAGACCGT
ACCTTGCAACAAGATTCTTCTTTGGAGCAGAATAAAAGATCTGGCCATCAGTTCACACAGTCCAGCGG
GACATGTTACCCCTGGAGGACACGCTGCTAGGCTACCTTGCTGATGACCTCACATGGTGTGGTGAATTCA
ACACTTCCAAAATAAACTATCAATCTTGCCAGACTGGAGAAAGGACTGCAGCAACAACCTGTTTCAGT
ATTCTGGAAAACGGTTTCCCGCAGGTTTGCAGAAGCTGCCTGTGATGTGGTCCATGTGATGCTCAATGGA
TCCCGCAGTAAATCTTTGACAAAACAGCACTTTTGGGAGTGTGGAAGTCCATAATTTGCAACCAGAGA
AGGTTCCAGACTAGAGGCTGGGTGATACATGGTGAAGAGAAGATTCCAGAGACTTATGCCAGGATCC
CACCATAAAAGAGCTGGAATCGATTATAAGCAAAAGGAATATTTCAATTTCTGCAAGAATATCTACAGA
CTGACAAGTTTCTTCAGTGTGAAAAATCCTGAGGATTCATCTGCACATCTGAGATC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC203179 protein sequence
Red=Cloning site Green=Tags(s)

MANCEFSPVSGDKPCCRLSRRAQLCLGVSILVLIILVVVLAVVVPWRWQQWSGPGTTKRFPETVLARCVKY
 TEIHPEMRHVDCQSVWDAFKGAFISKHPCNITEEDYQPLMKLGTQTVPCNKILLWSRIKDLAQFTQVQR
 DMFTLEDTLGLYLAADDL TWCGEFNTSKINYQSCPDRKDCSNNPVSFVFKTVSRRFAEAACDVVHMLNG
 SRSKIFDKNSTFGSVEVHNLQPEKVQTL EAWVIHGGREDSRDLQDPTIKELESII SKRNIQFSCKNIYR
 PDKFLQCVKNPEDSSCTSEI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6078_a05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001775

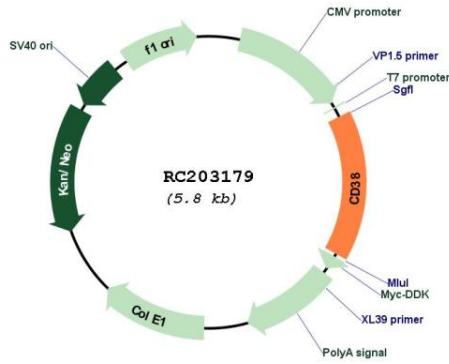
ORF Size: 900 bp

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.

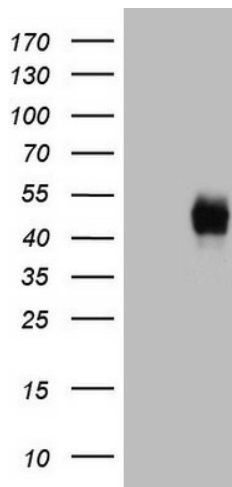
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<ol style="list-style-type: none">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_001775.4
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 RefSeq, Sep 2015]

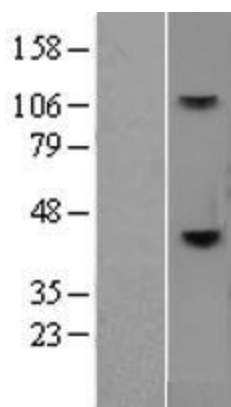
Product images:



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]).