

Product datasheet for RC207947

OriGene Technologies, Inc. 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

CD299 (CLEC4M) (NM_014257) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CD299 (CLEC4M) (NM_014257) Human Tagged ORF Clone

Tag: Myc-DDK Symbol: CD299

Synonyms: CD209L; CD299; DC-SIGN2; DC-SIGNR; DCSIGNR; HP10347; L-SIGN; LSIGN

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC207947 ORF sequence

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGAGTGACTCCAAGGAACCAAGGGTGCAGCAGCTGGGCCTCCTGGAAGAAGATCCAACAACCAGTGGCA TCAGACTTTTTCCAAGAGACTTTCAATTCCAGCAGATACATGGCCACAAGAGCTCTACAGGGTGTCTTGG CCATGGCGCCCTGGTGCTGCAACTCCTCTCCTTCATGCTCTTGGCTGGGGTCCTGGTGGCCATCCTTGTC CAAGTGTCCAAGGTCCCCAGCTCCCTAAGTCAGGAACAATCCGAGCAAGACGCAATCTACCAGAACCTGA CCCAGCTTAAAGCTGCAGTGGGTGAGCTCTCAGAGAAATCCAAGCTGCAGGAGATCTACCAGGAGCTGAC CCAGCTGAAGGCTGCAGTGGGTGAGTTGCCAGAGAAATCCAAGCTGCAGGAGATCTACCAGGAGCTGACC CGGCTGAAGGCTGCAGTGGGTGAGTTGCCAGAGAAATCCAAGCTGCAGGAGATCTACCAGGAGCTGACCC GGCTGAAGGCTGCAGTGGGTGAGTTGCCAGAGAAATCCAAGCTGCAGGAGATCTACCAGGAGCTGACCCG GCTGAAGGCTGCAGTGGGTGAGTTGCCAGAGAAATCCAAGCTGCAGGAGATCTACCAGGAGCTGACGGAG CTGAAGGCTGCAGTGGGTGAGTTGCCAGAGAAATCCAAGCTGCAGGAGATCTACCAGGAGCTGACCCAGC TGAAGGCTGCAGTGGGTGAGTTGCCAGACCAGTCCAAGCAGCAAATCTATCAAGAACTGACCGATTT GAAGACTGCATTTGAACGCCTGTGCCGCCACTGTCCCAAGGACTGGACATTCTTCCAAGGAAACTGTTAC TTCATGTCTAACTCCCAGCGGAACTGGCACGACTCCGTCACCGCCTGCCAGGAAGTGAGGGCCCAGCTCG TCGTAATCAAAACTGCTGAGGAGCAGAACTTCCTACAGCTGCAGACTTCCAGGAGTAACCGCTTCTCCTG GATGGGACTTTCAGACCTAAATCAGGAAGGCACGTGGCAATGGGTGGACGGCTCACCTCTGTCACCCAGC TTCCAGCGGTACTGGAACAGTGGAGAACCCAACAATAGCGGGAATGAAGACTGTGCGGAATTTAGTGGCA GTGGCTGGAACGACAATCGATGTGACGTTGACAATTACTGGATCTGCAAAAAGCCCGCAGCCTGCTTCAG **AGACGAA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA





Protein Sequence: >RC207947 protein sequence

Red=Cloning site Green=Tags(s)

MSDSKEPRVQQLGLLEEDPTTSGIRLFPRDFQFQQIHGHKSSTGCLGHGALVLQLLSFMLLAGVLVAILV QVSKVPSSLSQEQSEQDAIYQNLTQLKAAVGELSEKSKLQEIYQELTQLKAAVGELPEKSKLQEIYQELT RLKAAVGELPEKSKLQEIYQELTRLKAAVGELPEKSKLQEIYQELTE LKAAVGELPEKSKLQEIYQELTQLKAAVGELPDQSKQQQIYQELTDLKTAFERLCRHCPKDWTFFQGNCY FMSNSQRNWHDSVTACQEVRAQLVVIKTAEEQNFLQLQTSRSNRFSWMGLSDLNQEGTWQWVDGSPLSPS FQRYWNSGEPNNSGNEDCAEFSGSGWNDNRCDVDNYWICKKPAACFRDE

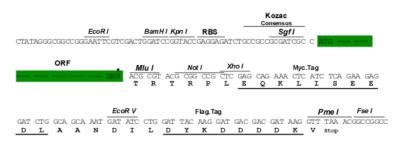
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6136 e07.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_014257

ORF Size: 1197 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 014257.5</u>

 RefSeq Size:
 1976 bp

 RefSeq ORF:
 1200 bp

 Locus ID:
 10332

 UniProt ID:
 Q9H2X3

 Cytogenetics:
 19p13.2

Protein Families: Druggable Genome, Transmembrane

MW: 45.4 kDa

Gene Summary: This gene encodes a C-type lectin that functions in cell adhesion and pathogen recognition.

This receptor recognizes a wide range of evolutionarily divergent pathogens with a large impact on public health, including tuberculosis mycobacteria, and viruses including Ebola, hepatitis C, HIV-1, influenza A, West Nile virus and the SARS-CoV acute respiratory syndrome coronavirus. The protein is organized into four distinct domains: a C-terminal carbohydrate

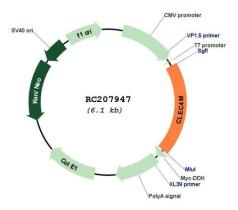
recognition domain, a flexible tandem-repeat neck domain of variable length, a

transmembrane region and an N-terminal cytoplasmic domain involved in internalization. This gene is closely related in terms of both sequence and function to a neighboring gene, CD209 (Gene ID: 30835), also known as DC-SIGN. The two genes differ in viral recognition and expression patterns, with this gene showing high expression in endothelial cells of the liver, lymph node and placenta. Polymorphisms in the tandem repeat neck domain are associated

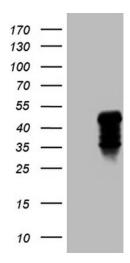
with resistance to SARS infection. [provided by RefSeq, May 2020]



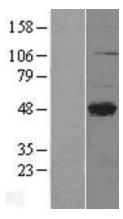
Product images:

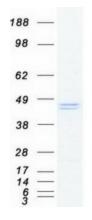


Circular map for RC207947



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CLEC4M (Cat# RC207947, 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-CLEC4M (Cat# [TA810067])(1:2000). Positive lysates [LY402300] (100ug) and [LC402300] (20ug) can be purchased separately from OriGene.





Western blot validation of overexpression lysate (Cat# [LY403743]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC211716] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified CLEC4M protein (Cat# [TP307947]). The protein was produced from HEK293T cells transfected with CLEC4M cDNA clone (Cat# RC207947) using MegaTran 2.0 (Cat# [TT210002]).