

# **Product datasheet for RC226741**

### 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\_001144905) Human Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** CD299 (CLEC4M) (NM\_001144905) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: CD299

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

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)



ORF Nucleotide Sequence:

>RC226741 ORF sequence, codon optimized.

Due to the complexity of NM\_001144905, the ORF clone is codon optimized for mammalian Expression.

The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGAGTGACTCCAAGGAACCAAGGGTGCAGCAGCTGGGCCTCCTGGAAGATCCAACAACCAGTGGCATCA GACTTTTTCCAAGAGACTTTCAATTCCAGCAGATACATGGCCACAAGAGCTCTACAGGGTGTCTTGGCCA TGGCGCCCTGGTGCTGCAACTCCTCTCCTTCATGCTCTTGGCTGGGGTCCTGGTGGCCATCCTTGTCCAA GTGTCCAAGGTCCCCAGCTCCCTAAGTCAGGAACAATCCGAGCAAGACGCAATCTACCAGAACCTGACCC AGCTTAAAGCTGCAGTGGGTGAGCTCTCAGAGAAATCCAAGCTGCAGGAGATCTACCAGGAGCTGACCCA GCTGAAGGCTGCAGTGGGTGAGTTGCCAGAGAAATCCAAGTTGCAAGAGATTTATCAAGAATTGACAAGA CTGAAAGCTGCTGTTGGTGAACTGCCTGAAAAGAGCAAACTTCAAGAAATCTATCAGGAGTTGACGAGGT TGAAAGCCGCCGTGGGGGAACTGCCCGAGAAGTCAAAGCTGCAAGAGATTTACCAAGAACTGACCGAGCT GAAAGCCGCAGTCGGCGAGTTGCCCGAAAAATCTAAGCTCCAAGAGATATATCAGGAGTTGACCCAGCTG AAAGCAGCCGTGGGCGAATTGCCTGATCAGTCAAAACAGCAGCAAATATATCAAGAACTCACAGACCTCA AGACAGCGTTTGAACGCCTGTGCCGACATTGTCCAAAGGATTGGACTTTCTTCCAGGGGAACTGTTACTT TATGTCCAATAGCCAAAGAAATTGGCATGACTCTGTGACTGCCAAGAGGTCCGGGCTCAGCTTGTG GTGATTAAAACCGCTGAGGAGCAGAACTTTTTGCAGCTGCAGACCTCTAGATCTAACCGCTTTTCATGGA CCAGCGGTATTGGAACTCTGGCGAGCCTAATAATAGTGGGAATGAGGACTGTGCTGAGTTTTCCGGCTCC GGGTGGAATGACAACCGATGTGACGTGGACAACTACTGGATTTGTAAGAAGCCTGCTGCGTGCTTTCGGG **ATGAA** 

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** 

>RC226741 representing NM\_001144905
Red=Cloning site Green=Tags(s)

MSDSKEPRVQQLGLLEDPTTSGIRLFPRDFQFQQIHGHKSSTGCLGHGALVLQLLSFMLLAGVLVAILVQ VSKVPSSLSQEQSEQDAIYQNLTQLKAAVGELSEKSKLQEIYQELTQLKAAVGELPEKSKLQEIYQELTR LKAAVGELPEKSKLQEIYQELTRLKAAVGELPEKSKLQEIYQELTELKAAVGELPEKSKLQEIYQELTQL KAAVGELPDQSKQQQIYQELTDLKTAFERLCRHCPKDWTFFQGNCYFMSNSQRNWHDSVTACQEVRAQLV VIKTAEEQNFLQLQTSRSNRFSWMGLSDLNQEGTWQWVDGSPLSPSFQRYWNSGEPNNSGNEDCAEFSGS GWNDNRCDVDNYWICKKPAACFRDE

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V** 

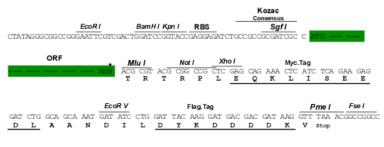
**Restriction Sites:** 

Sgfl-Mlul



#### **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_001144905

ORF Size: 1125 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.

RefSeq: <u>NM 001144905.1</u>, <u>NP 001138377.1</u>

RefSeq Size: 1904 bp
RefSeq ORF: 1128 bp
Locus ID: 10332
UniProt ID: Q9H2X3



Cytogenetics: 19p13.2

**Protein Families:** Druggable Genome, Transmembrane

MW: 42.6 kDa

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

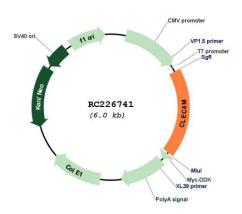
This receptor recognizes a wide range of evolutionarily divergent pathogens with a large impact on public health, including tuberculosis mycobacteria, and viruses including Ebola, hepatitis C, HIV-1, influenza A, West Nile virus and the SARS-CoV acute respiratory syndrome coronavirus. The protein is 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 RC226741