

Product datasheet for RC227188

OriGene Technologies, Inc.

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CD299 (CLEC4M) (NM_001144907) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CD299 (CLEC4M) (NM_001144907) 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)

CD299 (CLEC4M) (NM_001144907) Human Tagged ORF Clone - RC227188

ORF Nucleotide Sequence:

>RC227188 ORF sequence, codon optimized.

Due to the complexity of NM_001144907, 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

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC227188 representing NM_001144907
Red=Cloning site Green=Tags(s)

MSDSKEPRVQQLGLLEEDPTTSGIRLFPRDFQFQQIHGHKSSTVPFLLGPVSKVPSSLSQEQSEQDAIYQ NLTQLKAAVGELSEKSKLQEIYQELTQLKAAVGELPEKSKLQEIYQELTRLKAAVGELPEKSKLQEIYQELTRLKAAVGELPEKSKLQEIYQELTRLKAAVGELPEKSKLQEIYQELTQLKAAVERLCRHCPKDWTFFQG NCYFMSNSQRNWHDSVTACQEVRAQLVVIKTAEEQNFLQLQTSRSNRFSWMGLSDLNQEGTWQWVDGSPL SPSFQRYWNSGEPNNSGNEDCAEFSGSGWNDNRCDVDNYWICKKPAACFRDE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

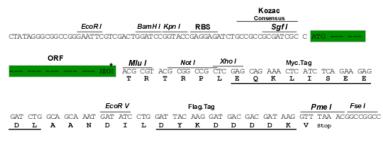
Restriction Sites:

Sgfl-Mlul



Cloning Scheme:





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

ACCN: NM_001144907

ORF Size: 996 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 001144907.1</u>, <u>NP 001138379.1</u>

RefSeq Size: 1775 bp
RefSeq ORF: 999 bp
Locus ID: 10332
UniProt ID: Q9H2X3
Cytogenetics: 19p13.2



Protein Families: Druggable Genome, Transmembrane

MW: 38 kDa

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

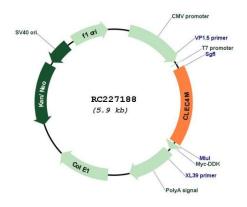
This receptor recognizes a wide range of evolutionarily divergent pathogens with a large impact on public health, including tuberculosis mycobacteria, and viruses including Ebola, hepatitis C, HIV-1, influenza A, West Nile virus and the SARS-CoV acute respiratory syndrome coronavirus. The protein is 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 RC227188