

Product datasheet for SC325681

OriGene Technologies, Inc.

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CD299 (CLEC4M) (NM_001144906) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: CD299 (CLEC4M) (NM 001144906) Human Untagged Clone

Tag: Tag Free Symbol: CD299

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

Vector: <u>pCMV6 series</u>

Fully Sequenced ORF: >NCBI ORF sequence for NM_001144906, the custom clone sequence may differ by one or

more nucleotides

ATGAGTGACTCCAAGGAACCAAGGGTGCAGCAGCTGGGCCTCCTGGAAGAAGATCCAACA
ACCAGTGGCATCAGACTTTTTCCAAGAGACTTTCAATTCCAGCAGATACATGGCCACAAG
AGCTCTACAGTTCCTTTTCTTCTTGGCCCAGTGTCCAAGGTCCCCAGCTCCCTAAGTCAG
GAACAATCCGAGCAAGACGCAATCTACCAGAACCTGACCCAGCTTAAAGCTGCAGTGGGT
GAGCTCTCAGAGAAATCCAAGCTGCAGGAGATCTACCAGGAGCTGACCCAGCTGAAGGCT
GCAGTGGGTGAGTTGCCAGAGAAATCCAAGCTGCAGGAGATCTACCAGGAGCTGACCCGG
CTGAAGGCTGCAGTGGAACGCCTGTCCCACGCGCACTGTCCCAAGGACTCGACATTCTTCCAA
GGAAACTGTTACTTCATGTCTAACTCCCAGCGGAACTGGCACGACCTCGTCACCGCCTGC
CAGGAAGTGAGGGCCCAGCTCGTCATAATCAAAACTGCTGAGGACACTTCCTACAG
CTGCAGACTTCCAGGAGTAACCGCTTCTCCTGGATGGGACTTTCAGACCTAAATCAGGAA
GGCACGTGGCAATGGGTGGACGGCTCACCTCTTCACCCCAGCTTCCAGCGGTACTGGAAC
AGTGGAGAACCCAACAATAGCGGGAATGAAGACTGTCGCAAAAAAGCCCGCAGCCTGCTC
AACGACAATCGATGTGACGTTGACAATTACTGGATCTGCAAAAAAGCCCGCAGCCTGCTTC

AGAGACGAA

Restriction Sites: Please inquire **ACCN:** NM_001144906

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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.

RefSeg: NM 001144906.1, NP 001138378.1

RefSeq Size: 1568 bp
RefSeq ORF: 792 bp
Locus ID: 10332
UniProt ID: Q9H2X3
Cytogenetics: 19p13.2

Protein Families: Druggable Genome, Transmembrane

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]

Transcript Variant: This variant (7) lacks an exon and uses an alternate in-frame splice site in the coding region compared to variant 1. This results in a shorter protein (isoform 7)

compared to isoform 1. The encoded isoform (7) lacks a transmembrane domain and has 2.5

repeats in the neck domain.