

Product datasheet for SC325845

OriGene Technologies, Inc.

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CD299 (CLEC4M) (NM_001144910) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: CD299 (CLEC4M) (NM_001144910) 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_001144910, the custom clone sequence may differ by one or

more nucleotides

ATGAGTGACTCCAAGGAACCAAGGGTGCAGCAGCTGGGCCTCCTGGAAGAAGATCCAACA ACCAGTGGCATCAGACTTTTTCCAAGAGACTTTCAATTCCAGCAGATACATGGCCACAAG AGCTCTACAGGGTGTCTTGGCCATGGCGCCCTGGTGCTGCAACTCCTCTCCTTCATGCTC TTGGCTGGGGTCCTGGTGGCCATCCTTGTCCAAGTGTCCAAGGTCCCCAGCTCCCTAAGT CAGGAACAATCCGAGCAAGACGCAATCTACCAGAACCTGACCCAGCTTAAAGCTGCAGTG GGTGAGCTCTCAGAGAAATCCAAGCTGCAGGAGATCTACCAGGAGCTGACCCAGCTGAAG GCTGCAGTGGGTGAGTTGCCAGAGAAATCCAAGCTGCAGGAGATCTACCAGGAGCTGACC CGGCTGAAGGCTGCAGTGGGTGAGTTGCCAGAGAAATCCAAGCTGCAGGAGATCTACCAG GAGCTGACCCGGCTGAAGGCTGCAGTGGGTGAGTTGCCAGAGAAATCCAAGCTGCAGGAG ATCTACCAGGAGCTGACGGAGCTGAAGGCTGCAGTGGGTGAGTTGCCAGAGAAATCCAAG CTGCAGGAGATCTACCAGGAGCTGACCCAGCTGAAGGCTGCAGTGGGTGAGTTGCCAGAC CAGTCCAAGCAGCAGCAAATCTATCAAGAACTGACCGATTTGAAGACTGCATTTGAACGC CTGTGCCGCCACTGTCCCAAGGACTGGACATTCTTCCAAGGAAACTGTTACTTCATGTCT AACTCCCAGCGGAACTGGCACGACTCCGTCACCGCCTGCCAGGAAGTGAGGGCCCAGCTC GTCGTAATCAAAACTGCTGAGGAGCAGAACTTCCTACAGCTGCAGACTTCCAGGAGTAAC CGCTTCTCCTGGATGGGACTTTCAGACCTAAATCAGGAAGGCACGTGGCAATGGGTGGAC GGCTCACCTCTGTCACCCAGCTTCCAGCGGTACTGGAACAGTGGAGAACCCAACAATAGC GGGAATGAAGACTGTGCGGAATTTAGTGGCAGTGGCTGGAACGACAATCGATGTGACGTT GACAATTACTGGATCTGCAAAAAGCCCGCAGCCTGCTTCAGAGACGAA

Restriction Sites: Please inquire **ACCN:** NM 001144910

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).



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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.

RefSeq: <u>NM 001144910.1</u>, <u>NP 001138382.1</u>

 RefSeq Size:
 1907 bp

 RefSeq ORF:
 1131 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.

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 (8) uses an alternate in-frame splice site in the coding region, compared to variant 1. This results in a shorter protein (isoform 8) compared to isoform 1.

The encoded isoform (8) has 6.5 repeats in the neck domain.