

Product datasheet for **RG226741**

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:	TurboGFP
Symbol:	CD299
Synonyms:	CD209L; CD299; DC-SIGN2; DC-SIGNR; DCSIGNR; HP10347; L-SIGN; LSIGN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG226741 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)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAGTGACTCCAAGGAACCAAGGGTGCAGCAGCTGGGCCTCCTGGAAGATCCAACAACCAAGTGGCATCA
 GACTTTTTCCAAGAGACTTTCAATTCAGCAGATACATGGCCACAAGAGCTCTACAGGGTGTCTTGCCCA
 TGGCGCCCTGGTCTGCAACTCCTCTCCTTCATGCTCTTGCTGGGGTCTGGTGGCCATCCTTGCCAA
 GTGTCCAAGTCCCAGCTCCCTAAGTCAGGAACAATCCGAGCAAGACGCAATCTACCAGAACCTGACCC
 AGCTTAAAGCTGCAGTGGGTGAGCTCTCAGAGAAATCCAAGCTGCAGGAGATCTACCAGGAGCTGACCCA
 GCTGAAGGCTGCAGTGGGTGAGTTGCCAGAGAAATCCAAGTTGCAAGAGATTTATCAAGAATTGACAAGA
 CTGAAAGCTGCTGTTGGTGAAGTGCCTGAAAAGAGCAAATTCAGAAATCTATCAGGAGTTGACGAGGT
 TGAAAGCCGCGTGGGGAACTGCCCGAGAAGTCAAAGCTGCAAGAGATTTACCAAGAAGTACCCGAGCT
 GAAAGCCGAGTCGGCGAGTTGCCCGAAAAATCTAAGCTCCAAGAGATATATCAGGAGTTGACCCAGCTG
 AAAGCAGCCGTGGGCGAATTGCCTGATCAGTCAAACAGCAGCAAATATATCAAGAAGTACAGACCTCA
 AGACAGCGTTTGAACGCCTGTGCCGACATTGTCCAAGGATTGGACTTTCTTCCAGGGAACTGTTACTT
 TATGTCCAATAGCCAAAGAAATTTGGCATGACTCTGTGACTGCATGCCAAGAGGTCGGGCTCAGCTGTG
 GTGATTAACCCGCTGAGGAGCAGAACTTTTTGCAGCTGCAGACCTCTAGATCTAACCGCTTTTCATGGA
 TGGGACTGTCTGATTTGAACCAGGAAGGCACCTGGCAGTGGGTGGATGGATCCCCCTGTCTCCGCTTTT
 CCAGCGGTATTGGAAGTCTGGCAGCCTAATAATAGTGGGAATGAGGACTGTGCTGAGTTTTCCGCTCC
 GGGTGGAAATGACAACCGATGTGACGTGGACAACACTACTGGATTTGTAAGAAGCCTGCTGCGTGCTTTCGGG
 ATGAA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG226741 representing NM_001144905
 Red=Cloning site Green=Tags(s)

MSDSKEPRVQQLGLEDPTTSGIRLFPRDFQFQQIHGHKSSTGCLGHGALVLQLLSFMLLAGVLVAILVQ
 VSKVPSLSQEQSEQDAIYQNLTLKAAVAVGELSEKSKLQEIYQELTLKAAVAVGELPEKSKLQEIYQELTR
 LKAAVAVGELPEKSKLQEIYQELTRLKAAVAVGELPEKSKLQEIYQELTELKAAVAVGELPEKSKLQEIYQELTQL
 KAAVAVGELPDQSKQQIYQELTDLKTAFERLCRHCPKDWTFQGNCFMSNSQRNWHDSVTACQEVRAQLV
 VIKTAEENFLQLQTSRNSRFSWMGLSDLNQEQTWQWVDGSPSPSFQRYWNSGEPNNSGNECDCAEFSGS
 GWNDNRCDVDNYWICKKPAACFRDE

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


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: [NM_001144905.1](#), [NP_001138377.1](#)

RefSeq Size: 1904 bp

RefSeq ORF: 1128 bp

Locus ID: 10332

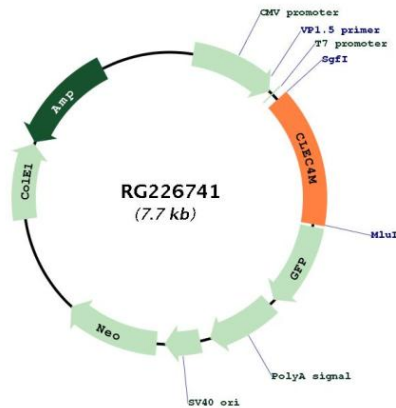
UniProt ID: [Q9H2X3](#)

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]

Product images:



Circular map for RG226741