

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

Product datasheet for RC226638

CD299 (CLEC4M) (NM_001144904) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CD299 (CLEC4M) (NM_001144904) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CD299
Synonyms:	CD209L; CD299; DC-SIGN2; DC-SIGNR; DCSIGNR; HP10347; L-SIGN; LSIGN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



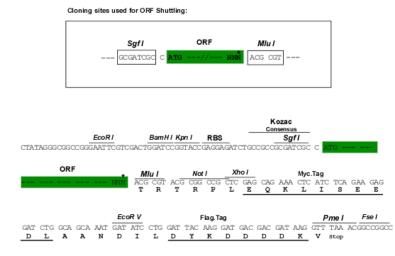
This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

CD299 (CLEC4M) (NM_001144904) Human Tagged ORF Clone – RC226638

ORF Nucleotide	>RC226638 ORF sequence, codon optimized. Due to the complexity of NM_001144904, the ORF clone is codon optimized for mammalian
Sequence:	Expression.
	The nucleotide sequence differs from the reference sequence, yet the amino acid
	sequence remains identical.
	<pre>Red=Cloning site Blue=ORF Green=Tags(s)</pre>
	TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCC <mark>GCGATCGC</mark> C
	ATGTCCGATTCAAAAGAACCCCGGGTGCAGCAACTGGGGCTGCTCGGGTGCCTCGGGCATGGCGCATTGG
	TCCTGCAACTCCTGAGTTTTATGTTGCTGGCTGGTGGTGGCTGGTGGCTATCCTCGTACAGGTAAGCAAAGT
	CCCGTCTTCTCTCCCAGGAGCAGTCAGAGCAGGATGCTATCTACCAAAATTTGACCCAGCTGAAGGCG
	GCCGTCGGAGAGCTTAGCGAGAAGTCTAAACTTCAGGAGATTTATCAAGAACTGACCCAACTCAAAGCCG
	CCGTGGGAGAGCTGCCCGAGAAAAGCAAGCTCCAAGAAATTTACCAGGAACTGACGAGGCTTAAGGCTGC
	AGTCGGCGAGCTGCCTGAAAAGAGCAAGCTGCAGGAGATCTATCAAGAGTTGACAAGGCTGAAGGCGGCT GTAGGGGAGCTTCCCGAAAAGTCTAAGCTCCAGGAGATCTATCAGGAACTCACTGAACTCAAAGCCGCTG
	TAGGGGAACTCCCCGAGAAAGTCTAAGCTCCAGGAGATCTATCAGGAACTCACTGAACTCAAAGCCGCTG
	TGGCGAACTGCCGGACCAGTCCAAACAGCAGCAGCAGATCTACCAGGAATTGACTGAC
	GAACGCCTGTGCCGGCACTGCCCCAAAGATTGGACTTTCTTCCAAGGCAACTGCTATTTTATGTCTAATA
	GCCAGCGCAACTGGCACGACTCCGTGACCGCATGTCAGGAAGTGAGGGCGCAGCTCGTGGTGATCAAAAC
	CGCCGAGGAACAGAACTTCCTCCAACTGCAAACTTCAAGAAGCAATCGCTTCAGCTGGATGGGGGCTGTCC
	GATTTGAATCAGGAGGGGACCTGGCAGTGGGTCGACGGCTCTCCGCTGTCTCCATCTTTCCAGCGCTATT
	GGAACTCTGGAGAACCCAACAACTCCGGCAATGAGGACTGTGCTGAATTTAGTGGGAGTGGTTGGAATGA
	TAATAGGTGTGACGTGGATAACTACTGGATTTGCAAAAAACCGGCAGCCTGCTTCAGGGACGAA
	ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
	ACAAGGATGACGACGATAAGGTTTAA
Protein Sequence:	>RC226638 representing NM_001144904
	Red=Cloning site Green=Tags(s)
	MSDSKEPRVQQLGLLGCLGHGALVLQLLSFMLLAGVLVAILVQVSKVPSSLSQEQSEQDAIYQNLTQLKA
	AVGELSEKSKLQEIYQELTQLKAAVGELPEKSKLQEIYQELTRLKAAVGELPEKSKLQEIYQELTRLKAA
	VGELPEKSKLQEIYQELTELKAAVGELPEKSKLQEIYQELTQLKAAVGELPDQSKQQQIYQELTDLKTAF
	ERLCRHCPKDWTFFQGNCYFMSNSQRNWHDSVTACQEVRAQLVVIKTAEEQNFLQLQTSRSNRFSWMGLS
	DLNQEGTWQWVDGSPLSPSFQRYWNSGEPNNSGNEDCAEFSGSGWNDNRCDVDNYWICKKPAACFRDE
	TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Restriction Sites:	Sgfl-Mlul
	-

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

Cloning Scheme:



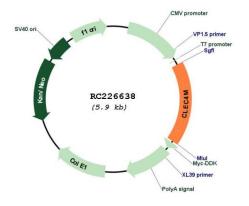
* The last codon before the Stop codon of the ORF

ACCN:	NM_001144904
ORF Size:	1044 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. <u>More info</u>
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:	 Centrifuge at 5,000xg for 5min. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. Close the tube and incubate for 10 minutes at room temperature. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 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 001144904.1, NP 001138376.1</u>
RefSeq Size:	1799 bp
RefSeq ORF:	1047 bp
Locus ID:	10332
Cytogenetics:	19p13.2
Protein Families:	Druggable Genome, Transmembrane

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

MW:	39.5 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 an 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 RC226638

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2023 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US