

Product datasheet for **RG226847**

DC SIGN (CD209) (NM_001144897) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DC SIGN (CD209) (NM_001144897) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CD209
Synonyms:	CDSIGN; CLEC4L; DC-SIGN; DC-SIGN1; hDC-SIGN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG226847 ORF sequence, **codon optimized**.
 Due to the complexity of NM_001144897, 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)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCGACTCTAAGGAACACGCTTGCAGCAATTGGGACTCTTGGAGGAAGAACAACCTGCGGGGGCTGG
 GATTCGCCGACACGAGGCTACAACTCACTGGCGGGCTGCCTGGGGCACGGACCCCTTGTCTCCAAC
 GTTGAGCTTACCCTCCTGGCTGGTCTGCTGGTCCAGTTTCAAAGGTACCAAGTAGCATCTCCCAAG
 CAATCCCGACAGGATGCTATTTACAAAATTTGACACAGCTGAAGGCTGCCGTGGTGAACCTTAGCGA
 AGTCCAAGCTGCAAGAGATTTATCAAGAGCTTACACAACCTAAAGCAGCAGTGGGGGAACCCCCAAAA
 AAGCAAGCTTCAGGAGATCTACCAAGAGTTGACACGACTCAAGGCCGAGTGGGTGAGCTTCCAGAGAAG
 TCAAACTCCAGGAAATCTATCAGGAGTTGACCTGGTGAAGGCCGCTGTTGGGGAGCTTCCCGAGAAAT
 CAAAGATGCAGGAGATCTATCAGGAGCTTACTAGGCTGAAGGCAGCTGTAGGGGAGCTTCCAGAAAAGTC
 CAAGCAGCAGGAGATATACCAAGAGCTCACTAGACTCAAAGCCGCCGTGGGGGAACCTTCTGAAAAAGC
 AAGCAGCAGGAAATTTATCAGGAACTGACCAGGCTCAAGCCGCCGAGTGGTGGAGCTGCCAGAAAAGTCAA
 AGCAACAGGAAATTTACCAGGAGCTCACACAGCTTAAAGGCTGCTGTGGAGCGCTCTGCCATCCCTGTCC
 TTGGGAGTGGACATTCTTTCAGGGTAATTGTTACTTTCATGAGCAATAGCCAGAAAAGTGGCAGATAGC
 ATTACCGCTTGAAGGAAGTCCGGGCTCAGCTTGTGGTGATCAAGAGTGCAGGAAGAACAGTCAAGCCGGA
 GTAACCGATTTACCTGGATGGGTCTTAGCGATCTGAACCAGGAAGGTACCTGGCAGTGGGTGGACGGCTC
 CCCCCTTCTGCCAAGTTTCAAACAATATTGGAACCGGGCGAGCCCAACAATGTTGGTGAGGAGATTGC
 GCGGAGTTTTCTGGTAACGGCTGGAATGACGACAAGTGAATCTCGCAAGTTTTGGATCTGTAAGAAGT
 CCGCCGCTCATGTAGCCGCGACGAAGAGCAGTTTCTCTCCCCGCTCCAGCTACGCCAAACCCCTCC
 TGCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG226847 representing NM_001144897
 Red=Cloning site Green=Tags(s)

MDSKEPRLQQLGLLEEEQLRGLGFRQTRGYKSLAGCLGHGPLVLQLLSFTLLAGLLVQVSKVPSSISQE
 QSRQDAIYQNLTLKAAVGELEKSKLQEIYQELTLKAAVGELEKSKLQEIYQELTRLKAAVGELEK
 SKLQEIYQELTWLKAAVGELEKSKMQEIYQELTRLKAAVGELEKSKQEIYQELTRLKAAVGELEK
 KQEIYQELTRLKAAVGELEKSKQEIYQELTLKAAVERLCHPCPWEWTFQGNCFMNSQRNWHDS
 ITACKEVGAQLVVIKSAEEQSSRSNRFTWMGLSDLNQEQTWQWVDGSPLLPSFKQYWNRGEPNNVGEEDC
 AEFSGNGWDDKCNLAKFWICKKSAASCSRDEEQFLSPAPATPNPPPA

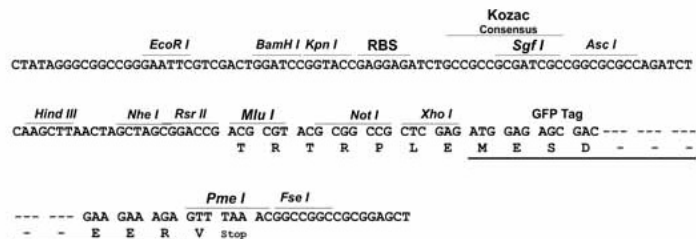
TRTRPLE – GFP Tag – V

Restriction Sites:

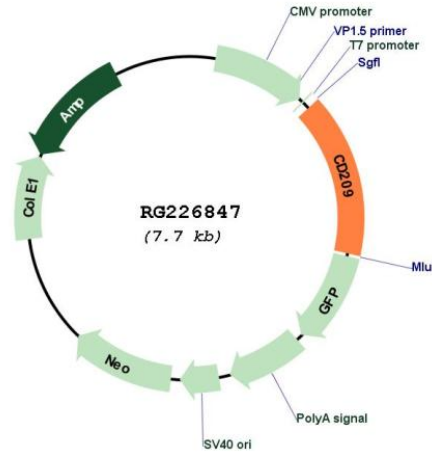
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001144897

ORF Size: 1194 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_001144897.1](#), [NP_001138369.1](#)

RefSeq Size: 4310 bp

RefSeq ORF: 1197 bp

Locus ID: 30835

UniProt ID: [Q9NNX6](#)

Cytogenetics: 19p13.2

Protein Families: Druggable Genome

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 leprosy and tuberculosis mycobacteria, the Ebola, hepatitis C, HIV-1 and Dengue viruses, 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, 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, CLEC4M (Gene ID: 10332), also known as L-SIGN. The two genes differ in viral recognition and expression patterns, with this gene showing high expression on the surface of dendritic cells. Polymorphisms in the neck region are associated with protection from HIV-1 infection, while single nucleotide polymorphisms in the promoter of this gene are associated with differing resistance and susceptibility to and severity of infectious disease, including rs4804803, which is associated with SARS severity. [provided by RefSeq, May 2020]