

Product datasheet for **RG227875**

DC SIGN (CD209) (NM_001144894) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DC SIGN (CD209) (NM_001144894) 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)



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ORF Nucleotide Sequence:

>RG227875 ORF sequence, **codon optimized**.
 Due to the complexity of NM_001144894, 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**CGATCGC**C

ATGTCGCAGACGAAGGAGCCAGACTGCAGCAGCTGGGTCTGCTGGTGTCAAAGTCCCATCCTCCATAA
 GTCAGGAACAGAGCCGGCAAGACGCTATTTATCAGAATCTGACCCAGCTGAAGGCCGAGTGGGCGAACT
 TTCGAAAAGAGCAAGCTCCAAGAAATTTATCAGGAGCTTACTCAGCTCAAAGCAGCCGTCGGGGAGCTT
 CCAGAAAAGAGTAACTTCAGGAGATCTATCAGGAGCTACCAGGCTGAAAGCCCGCTGGGAGAAGTGC
 CAGAAAAAGTAACTTCAAGAGATCTATCAAGAACTTACATGGCTTAAGGCAGCTGTCGGAGAGCTGCC
 AGAGAAGTCAAAGATGCAGGAGATATACAGGAGTTGACAAGGCTGAAGGCAGCCGTCGGGCGAGCTCCCC
 GAGAAGTCAAGCAGCAGGAAATCTATCAGGAGCTGACTAGACTGAAAGCCGCGTGGGCGAACTTCCCG
 AGAAGAGTAAACAGCAGGAAATTTACCAAGAAGTACACGCGCTGAAAGCAGCGGTGAGTCCCTGA
 GAAATCTAAACAACAAGAAATATACCAGGAACTCACTCAGCTGAAAGCCGCTGTGGAACGGCTGTGCCAT
 CCATGCCCGTGGGAATGGACATCTTCCAGGAAATGTTACTTCATGAGCAACTCTCAACGAACTGGC
 ATGATTCTATCACCGCTTGCAAAGAGGTTGGGGCCAGCTGGTGGTAATAAAGTCCGCCAGGAACAGAA
 TTTCTGCAGCTGCAGTCTCCAGATCTAACCCTTCACTTGGATGGGGCTGAGCGACTTGAATCAGGAG
 GGGACTTGGCAGTGGGTGGACGGCAGCCCTGCTGCCCTCTTTAAACAATACTGGAACAGAGGGGAAC
 CTAACAATGTGGGAGAAGAAGATTGCGCGAGTTCAGTGGCAACGGTTGGAACGACGACAAATGCAACCT
 GGCGAAGTTTTGGATCTGCAAGAAGAGTGCCGCAAGTTGCTCCCGCAGCAAGAGCAATTCCTCAGTCTC
 GCTCCAGCCACACCAACCCTCCCCCTGCA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG227875 representing NM_001144894
 Red=Cloning site Green=Tags(s)

MSDSKEPRLQQLGLLVSKVPSSISQEQSRQDAIYQNLTLKAAVGELSEKSKLQEIYQELTLKAAVGEL
 PEKSKLQEIYQELTRLKAAVGELPEKSKLQEIYQELTWLKAAVGELPEKSKMQEIYQELTRLKAAVGELP
 EKSKQEIYQELTRLKAAVGELPEKSKQEIYQELTRLKAAVGELPEKSKQEIYQELTLKAAVERLCH
 PCPWEWTFQGNCFMSNSQRNWHDSITACKEVGAQLVVIKSAEEQNFLQLQSSRSNRFTWMGLSDLNQE
 GTWQWVDGSPLLPSFKQYWNRGEPNNVGEEDCAEFSGNGWDDKCNLAKFWICKSAASCSRDEEQFLSP
 APATPNPPPA

TRTRPLE – GFP Tag – V

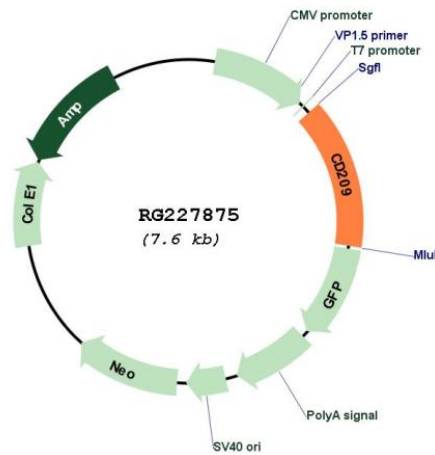
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001144894

ORF Size: 1080 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:	<ol style="list-style-type: none">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_001144894.1, NP_001138366.1</u>
RefSeq Size:	4196 bp
RefSeq ORF:	1083 bp
Locus ID:	30835
UniProt ID:	<u>Q9NNX6</u>
Cytogenetics:	19p13.2
Protein Families:	Druggable Genome
Gene Summary:	<p>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]</p>