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Product datasheet for RC227875

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:	Myc-DDK
Symbol:	DC SIGN
Synonyms:	CDSIGN; CLEC4L; DC-SIGN; DC-SIGN1; hDC-SIGN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC227875 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)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCCGACAGCAAGGAGCCCAGACTGCAGCAGCTGGGTCTGCTGGTGTCAAAGGTCCCATCCTCCATAA
GTCAGGAACAGAGCCGGCAAGACGCTATTTATCAGAATCTGACCCAGCTGAAGGCCGCAGTGGGCGAACT
TTCCGAAAAGAGCAAGCTCCAAGAAATTTATCAGGAGCTTACTCAGCTCAAAGCAGCCGTCGGGGAGCTT
CCAGAAAAGAGTAAACTTCAGGAGATCTATCAGGAGCTCACCAGGCTGAAAGCCGCCGTGGGAGAACTGC
CAGAAAAAAGTAAGCTTCAAGAGATCTATCAAGAACTTACATGGCTTAAGGCAGCTGTCGGAGAGCTGCC
AGAGAAGTCAAAGATGCAGGAGATATACCAGGAGTTGACAAGGCTGAAGGCAGCCGTGGGCGAGCTCCCC
GAGAAGTCTAAGCAGCAGGAAATCTATCAGGAGCTGACTAGACTGAAAGCCGCGGTGGGCGAACTTCCCG
AGAAGAGTAAACAGCAGGAAATTTACCAAGAACTGACACGCCTGAAAGCAGCGGTCGGTGAGCTCCCTGA
GAAATCTAAACAACAAGAAATATACCAGGAACTCACTCAGCTGAAAGCCGCTGTGGAACGGCTGTGCCAT
CCATGCCCGTGGGAATGGACATTCTTCCAGGGAAATTGTTACTTCATGAGCAACTCTCAACGAAACTGGC
ATGATTCTATCACCGCTTGCAAAGAGGTTGGGGCCCAGCTGGTGGTAATAAAGTCCGCCGAGGAACAGAA
TTTCCTGCAGCTGCAGTCCTCCAGATCTAACCGCTTCACTTGGATGGGGCTGAGCGACTTGAATCAGGAG
GGGACTTGGCAGTGGGTGGACGGCAGCCCCCTGCTGCCCTCCTTTAAACAATACTGGAACAGAGGGGAAC
CTAACAATGTGGGAGAAGAAGATTGCGCCGAGTTCAGTGGCAACGGTTGGAACGACGACAAATGCAACCT
GGCGAAGTTTTGGATCTGCAAGAAGAGTGCCGCAAGTTGCTCCCGCGACGAAGAGCAATTCCTCAGTCCT
GCTCCAGCCACACCCAACCCTCCCCCTGCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

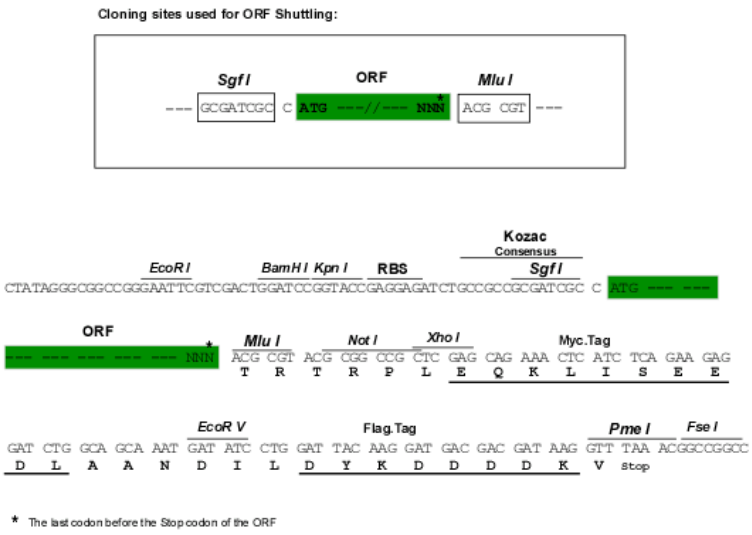
>RC227875 representing NM_001144894
Red=Cloning site Green=Tags(s)

MSDSKEPRLQQLGLLVSKVPSSISQEQSRQDAIYQNLTQLKAAVGELSEKSKLQEIYQELTQLKAAVGEL
PEKSKLQEIYQELTRLKAAVGELPEKSKLQEIYQELTWLKAAVGELPEKSKMQEIYQELTRLKAAVGELP
EKSKQQEIYQELTRLKAAVGELPEKSKQQEIYQELTRLKAAVGELPEKSKQQEIYQELTQLKAAVERLCH
PCPWEWTFFQGNCYFMSNSQRNWHDSITACKEVGAQLVVIKSAEEQNFLQLQSSRSNRFTWMGLSDLNQE
GTWQWVDGSPLLPSFKQYWNRGEPNNVGEEDCAEFSGNGWNDDKCNLAKFWICKKSAASCSRDEEQFLSP
APATPNPPPA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



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:
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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_001144894.1, NP_001138366.1

RefSeq Size: 4196 bp

RefSeq ORF: 1083 bp

Locus ID: 30835

UniProt ID: Q9NNX6

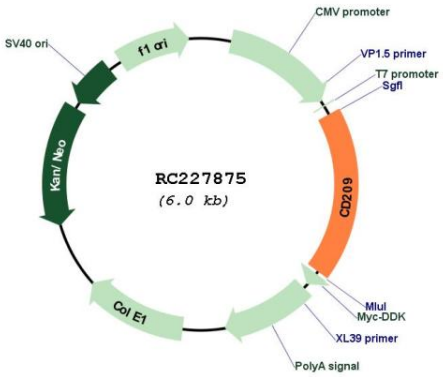
Cytogenetics: 19p13.2

Protein Families: Druggable Genome

MW: 41 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 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]

Product images:



Circular map for RC227875