

## Product datasheet for RC221599

### CD1 (CD1A) (NM\_001763) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CD1 (CD1A) (NM_001763) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CD1
Synonyms:	CD1; FCB6; HTA1; R4; T6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC221599 representing NM_001763 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTGTTTTTGGCTACTTCCATTGTTAGCTGTTCTCCAGGTGATGGCAATGCAGACGGGCTCAAGGAGC  
CTCTCTCCTTCCATGTCATCTGGATCGCATCCTTTTACAACCATTCTGGAAACAAAATCTGGTCTCAGG  
TTGGCTGAGTGATTTGCAGACTCATACTGGGACAGCAATCCAGCACCATCGTTTTCTGTGGCCCTGG  
TCCAGGGGAACTTCAGCAATGAGGAGTGAAGGAAGTGGAAACATTATCCGTATACGCACCATTCCGT  
CATTTGAGGGAATTCGTAGATACGCCATGAATTGCAGTTTGAATATCCTTTTGAGATACAGGTGACAGG  
AGGCTGTGAGCTGCACTCTGAAAAGGTCTCAGGAAGCTTCTTGCAGTTAGCTTATCAAGGATCAGACTTT  
GTGAGCTTCCAGAACAATTCATGTTGCCATATCCAGTGGCTGGGAATATGGCCAAGCATTTCTGCAAAG  
TGCTCAATCAGAAATCAGCATGAAAATGACATAACACACAATCTTCTCAGTGACACCTGCCACGTTTCAT  
CTTGGGTCTTCTTGATGCAGGAAAGGCACATCTCCAGCGCAAGTGAAGCCCAGGCCTGGCTGTCCCAT  
GGCCCCAGTCTGGCCCTGGCCATCTGCAGCTTGTGTGCCATGTCTCAGGATTCTACCCAAGCCCGTGT  
GGGTGATGTGGATGCGGGGTGAGCAGGAGCAGCAGGGCACTCAGCGAGGGGACATCTTGGCCAGTGTGA  
TGGGACATGGTATCTCCGCGCAACCCTGGAGGTGGCCGCTGGGGAGGCAGCTGACCTGTCTGTGGGTG  
AAGCACAGCAGTCTAGAGGGCCAGGACATCGTCTCTACTGGGAGCATCACAGTTCCGTGGGCTTCATCA  
TCTTGGCCGTGATAGTGCCTTACTTCTCTGATAGGTCTTGCCTTTGGTTCAGGAAACGCTGTTTCTG  
T

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC221599 representing NM\_001763  
Red=Cloning site Green=Tags(s)

MLFLLLPLLAVLPGDGNADGLKEPLSFHVIWIASFYNHWSWKQNLVSGWLSDLQHTWDSNSSTIVFLWPW  
 SRGNFSNEEWKELETLFRIRTIIRSFEGIRRYAHELQFEPFEIQVTGGCELSHSGKVSFSLQLAYQGSDF  
 VSFQNNSWLPYPVAGNMAKHFCVNLNQNQHENDITHNLLSDTCPRFILGLLDAGKAHLQRQVKPEAWLSH  
 GPSPGPGHLQLVCHVSGFYPKPVWMMRGEQEQQGTQRGDILPSADGTWYLRATLEVAAGEAADLSCRV  
 KHSSLEGQDIVLYWEHSSVGFII LAVIVPLLLL IGLALWFRKRCFC

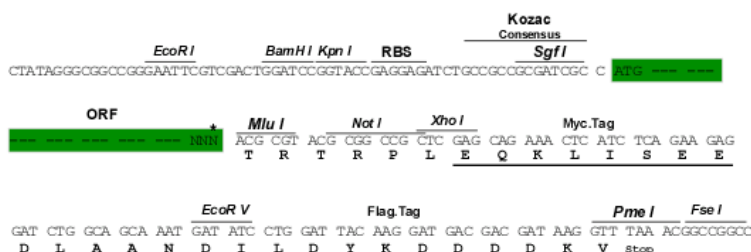
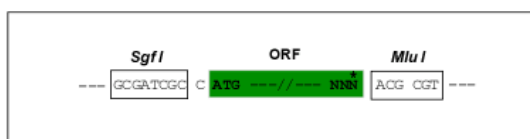
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8007\\_f12.zip](https://cdn.origene.com/chromatograms/mk8007_f12.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001763

**ORF Size:** 981 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\\_001763.1](#), [NP\\_001754.1](#)

**RefSeq Size:** 2072 bp

**RefSeq ORF:** 984 bp

**Locus ID:** 909

**UniProt ID:** [P06126](#)

**Cytogenetics:** 1q23.1

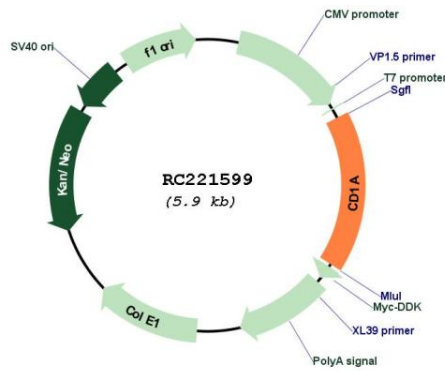
**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Hematopoietic cell lineage

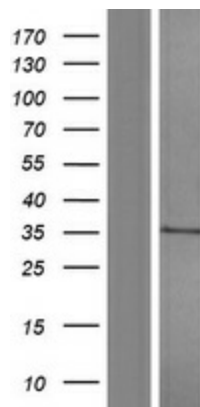
**MW:** 37.17 kDa

**Gene Summary:** This gene encodes a member of the CD1 family of transmembrane glycoproteins, which are structurally related to the major histocompatibility complex (MHC) proteins and form heterodimers with beta-2-microglobulin. The CD1 proteins mediate the presentation of primarily lipid and glycolipid antigens of self or microbial origin to T cells. The human genome contains five CD1 family genes organized in a cluster on chromosome 1. The CD1 family members are thought to differ in their cellular localization and specificity for particular lipid ligands. The protein encoded by this gene localizes to the plasma membrane and to recycling vesicles of the early endocytic system. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2016]

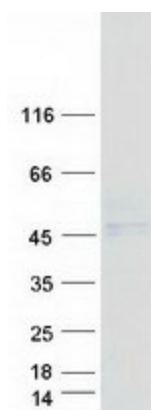
Product images:



Circular map for RC221599



Western blot validation of overexpression lysate (Cat# [LY419760]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221599 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CD1A protein (Cat# [TP321599]). The protein was produced from HEK293T cells transfected with CD1A cDNA clone (Cat# RC221599) using MegaTran 2.0 (Cat# [TT210002]).