

## Product datasheet for **RG219131**

### CD1B (NM\_001764) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CD1B (NM_001764) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CD1B
Synonyms:	CD1; CD1A; R1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG219131 representing NM_001764 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTGCTGCTGCCATTTCAACTGTTAGCTGTTCTCTTTCTGGTGGTAAACAGTGAACATGCCTTCCAGG  
GGCCGACCTCCTTTCATGTTATCCAGACCTCGTCTTTACCAATAGTACCTGGGCACAACTCAAGGCTC  
AGGCTGGTTGGATGATTTGCAGATTCATGGCTGGGATAGCGACTCAGGCACTGCCATATTCCTGAAGCCT  
TGGTCTAAAGGTAACCTTAGTGATAAGGAGTTGCTGAGTTAGAGGAGATATCCGAGTCTACATCTTTG  
GATTCGCTCGAGAAGTACAAGACTTTGCCGGTGATTTCCAGATGAAATACCCCTTTGAGATCCAGGGCAT  
AGCAGGCTGTGAGCTACATTCTGGAGGTGCCATAGTAAGCTTCCTGAGGGGAGCTCTAGGAGGATTGGAT  
TTCTGAGTGTCAGAATGCTTCATGTGTGCCCTCCCCAGAAGGTGGCAGCAGGGCACAGAAATCTGTG  
CACTAATCATACAATATCAAGGTATCATGGAACTGTGAGAATTCCTCTATGAAACCTGCCCCGATA  
TCTCTTGGGCGTCTCAATGCAGGAAAAGCAGATCTGCAAAGACAAGTGAAGCCTGAGGCCTGGCTGTCC  
AGTGGCCCCAGTCTGGACCTGGCCGTCTGCAGCTTGTGTGCCATGTCTCAGGATTTACCCAAAGCCCG  
TGTGGGTGATGTGGATGCGGGGTGAGCAGGAGCAGCAGGGCACTCAGCTAGGGGACATCTGCCAAATGC  
TAACTGGACATGGTATCTCCGAGCAACCCTGGATGTGGCAGATGGGGAGGCGGCTGGCCTGTCTGTCCG  
GTGAAGCACAGCAGTTTAGAGGGCCAGGACATCATCCTCTACTGGAGAAACCCACCTCCATTGGCTCAA  
TTGTTTTGGCAATAATAGTGCCTTCTTGTCTCTTTGCTATGCCTTGCATTATGGTATATGAGGCGCCG  
GTCATATCAGAATATCCCA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG219131 representing NM\_001764  
Red=Cloning site Green=Tags(s)

MLLLPFQLLAVLFPGGNSEHAFQGPTSFHVIQTSSFTNSTWAQTQGGWLDLQIHGWSDSGTAIFLKP  
 WSKGNFSDKEVALEEIFRVYIFGFAREVQDFAGDFQMKYPFEIQGIAGCELHSGGAIVSFLRGALGGLD  
 FLSVKNASCVPSPEGGSSRAQKFCALIIQYQGIMETVRILLYETCPRYLLGVLNAGKADLQRQVKPEAWLS  
 SGPSPGPGRLQLVCHVSGFYPKPVWVMWRGEQEQQGTQLGDILPNANWTWYLRATLDVADGEAAGLSCR  
 VKHSSLEGQDIILYWRNPTSIGSIVLAIIVPSLLLLLCLALWYMRRRSYQNIIP

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001764

**ORF Size:** 999 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\\_001764.3](#)

**RefSeq Size:** 1295 bp

**RefSeq ORF:** 1002 bp

**Locus ID:** 910

**UniProt ID:** [P29016](#)

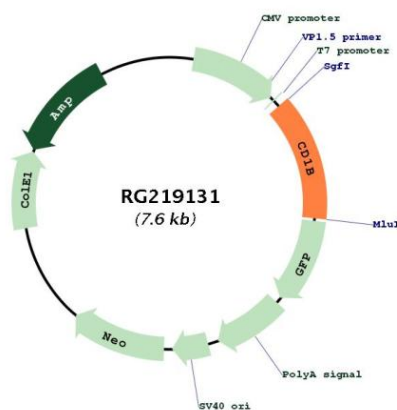
**Cytogenetics:** 1q23.1

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Hematopoietic cell lineage

**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 late endosomes and lysosomes via a tyrosine-based motif in the cytoplasmic tail, and requires vesicular acidification to bind lipid antigens. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RG219131