

Product datasheet for SC311339

OriGene Technologies, Inc.

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CD1E (NM_001042587) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: CD1E (NM 001042587) Human Untagged Clone

Tag: Tag Free Symbol: CD1E

Synonyms: CD1A; R2

Vector: <u>pCMV6 series</u>

Fully Sequenced ORF: >NCBI ORF sequence for NM_001042587, the custom clone sequence may differ by one or

more nucleotides

ATGCTGCTCCTGTTCCTCTCTCGAGGGTCTCTGCTGTCCTGGGGAAAATACAGCAGTG
AAGCCAGAGGCCTGGCTGTCCTGTGGCCCCAGTCCTGGCCCTGCCGTCTGCAGCTTGTG
TGCCATGTCTCAGGATTCTACCCAAAGCCCGTGTGGGTGATGTGGATGCGGGGTGAGCAG
GAGCAGCGGGGCACTCAGCGAGGGGACGTCCTGCCTAATGCTGACGAGACATGGTGGATA
TTCCATCTTTCTCATCCTGATCTGTTTGACTGTGATAGTTACCCTGGTCATATTGGTTGT

AGTTGA

Restriction Sites: Please inquire ACCN: NM 001042587

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: <u>NM 001042587.1</u>, <u>NP 001036052.1</u>

 RefSeq Size:
 1392 bp

 RefSeq ORF:
 306 bp

 Locus ID:
 913

 UniProt ID:
 P15812

 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 within Golgi compartments, endosomes, and lysosomes, and is cleaved into a stable soluble form. The soluble form is required for the intracellular processing of some glycolipids into a form that can be presented by other CD1 family members. Many alternatively spliced transcript variants encoding different isoforms have been described. Additional transcript variants have been found; however, their biological validity has not been determined. [provided by RefSeq, Jun 2010]

Transcript Variant: This variant (6) is missing two coding exons and uses an alternate splice site in the 3' coding region, which results in a translational frameshift, compared to variant 1. It encodes a protein (isoform f, also known as 10) that is shorter and has a distinct C-terminus compared to isoform a. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript

alignments.