

## Product datasheet for MR227669L4V

### OriGene Technologies, Inc.

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# Cd3e (NM\_007648) Mouse Tagged ORF Clone Lentiviral Particle

### **Product data:**

Product Type: Lentiviral Particles

**Product Name:** Cd3e (NM\_007648) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Cd3e

Synonyms: Al504783; CD3; CD3epsilon; T3e

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_007648

ORF Size: 567 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(MR227669).

Sequence:
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.

RefSeq: <u>NM 007648.4</u>

 RefSeq Size:
 1436 bp

 RefSeq ORF:
 570 bp

 Locus ID:
 12501

 UniProt ID:
 P22646

 Cytogenetics:
 9 24.84 cM







#### **Gene Summary:**

Part of the TCR-CD3 complex present on T-lymphocyte cell surface that plays an essential role in adaptive immune response. When antigen presenting cells (APCs) activate T-cell receptor (TCR), TCR-mediated signals are transmitted across the cell membrane by the CD3 chains CD3D, CD3E, CD3G and CD3Z. All CD3 chains contain immunoreceptor tyrosine-based activation motifs (ITAMs) in their cytoplasmic domain. Upon TCR engagement, these motifs become phosphorylated by Src family protein tyrosine kinases LCK and FYN, resulting in the activation of downstream signaling pathways. In addition of this role of signal transduction in T-cell activation, CD3E plays an essential role in correct T-cell development (PubMed:19956738, PubMed:24899501). Participates also in internalization and cell surface down-regulation of TCR-CD3 complexes via endocytosis sequences present in CD3E cytosolic region.[UniProtKB/Swiss-Prot Function]