

## Product datasheet for MR201306L4V

## OriGene Technologies, Inc.

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## Cd247 (NM\_001113391) Mouse Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

Product Name: Cd247 (NM 001113391) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Cd247

**Synonyms:** 4930549J05Rik; A430104F18Rik; AW552088; Cd3; Cd3-eta; Cd3-zeta; Cd3zeta; Cd3zeta; T3z;

Tcrk

Mammalian Cell

Selection:

Puromycin

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

Tag: mGFP

**ACCN:** NM\_001113391

ORF Size: 495 bp

**ORF Nucleotide** 

Sequence:

The ORF insert of this clone is exactly the same as(MR201306).

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 001113391.1</u>, <u>NP 001106862.1</u>

 RefSeq Size:
 1686 bp

 RefSeq ORF:
 495 bp

 Locus ID:
 12503

 UniProt ID:
 P24161

Cytogenetics: 1 73.14 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. CD3Z ITAMs phosphorylation creates multiple docking sites for the protein kinase ZAP70 leading to ZAP70 phosphorylation and its conversion into a catalytically active enzyme. Plays an important role in intrathymic T-cell differentiation. Additionally, participates in the activity-dependent synapse formation of retinal ganglion cells (RGCs) in both the retina and dorsal lateral geniculate nucleus (dLGN). [UniProtKB/Swiss-Prot Function]