

Product datasheet for MR224619L4V

OriGene Technologies, Inc.

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Cd247 (NM_031162) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Cd247 (NM_031162) 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_031162

ORF Size: 618 bp

ORF Nucleotide

Sequence:

The ORF insert of this clone is exactly the same as(MR224619).

OTI Disclaimer:

sclaimer: 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 031162.4</u>, <u>NP 112439.1</u>

 RefSeq Size:
 1358 bp

 RefSeq ORF:
 621 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]