

Product datasheet for MR202353L3V

OriGene Technologies, Inc.

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Clec4e (NM_019948) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Clec4e (NM_019948) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Clec4e

Synonyms: C86253; Clecsf9; Mincle

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Tag: Myc-DDK
ACCN: NM 019948

ORF Size: 645 bp

ORF Nucleotide

Sequence:

The ORF insert of this clone is exactly the same as(MR202353).

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 019948.2</u>, <u>NP 064332.1</u>

 RefSeq Size:
 2519 bp

 RefSeq ORF:
 645 bp

 Locus ID:
 56619

 UniProt ID:
 Q9R0Q8

Cytogenetics: 6 58.35 cM



Gene Summary:

A calcium-dependent lectin that acts as a pattern recognition receptor of the innate immune system. Recognizes damage-associated molecular patterns (DAMPs) of abnormal self and pathogen-associated molecular patterns (PAMPs) of bacteria and fungi (PubMed:18509109, PubMed:19171887, PubMed:23602766, PubMed:18776906). The PAMPs notably include mycobacterial trehalose 6,6'-dimycolate (TDM), a cell wall glycolipid with potent adjuvant immunomodulatory functions (PubMed:23602766). Interacts with signaling adapter Fc receptor gamma chain/FCER1G to form a functional complex in myeloid cells (PubMed:23602766, PubMed:18776906). Binding of mycobacterial trehalose 6,6'-dimycolate (TDM) to this receptor complex leads to phosphorylation of the immunoreceptor tyrosinebased activation motif (ITAM) of FCER1G, triggering activation of SYK, CARD9 and NF-kappa-B, consequently driving maturation of antigen-presenting cells and shaping antigen-specific priming of T-cells toward effector T-helper 1 and T-helper 17 cell subtypes (PubMed:23602766). Specifically recognizes alpha-mannose residues on pathogenic fungi of the genus Malassezia and mediates macrophage activation (PubMed:19171887). Through recognition of DAMPs released upon nonhomeostatic cell death, enables immune sensing of damaged self and promotes inflammatory cell infiltration into the damaged tissue (PubMed:18776906).[UniProtKB/Swiss-Prot Function]