

Product datasheet for RR200562L4

Clec4e (NM_001005897) Rat Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Clec4e (NM_001005897) Rat Tagged Lenti ORF Clone

Tag: mGFP Symbol: Clec4e

Synonyms: Clecsf9; Mincle

Mammalian Cell Puromycin

Selection:

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

E. coli Selection: Chloramphenicol (34 ug/mL)

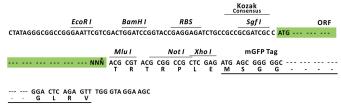
ORF Nucleotide The ORF insert of this clone is exactly the same as(RR200562).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.



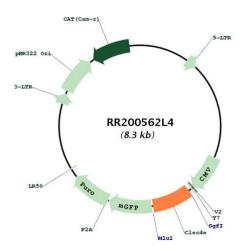
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Plasmid Map:



ACCN: NM_001005897

ORF Size: 645 bp

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.

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 001005897.1</u>, <u>NP 001005897.1</u>

RefSeq Size: 730 bp RefSeq ORF: 648 bp



Clec4e (NM_001005897) Rat Tagged Lenti ORF Clone - RR200562L4

 Locus ID:
 450223

 UniProt ID:
 Q67EQ1

 Cytogenetics:
 4q42

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. The PAMPs notably include mycobacterial trehalose 6,6'-dimycolate (TDM), a cell wall glycolipid with potent adjuvant immunomodulatory functions (By similarity). Interacts with signaling adapter Fc receptor gamma chain/FCER1G to form a functional complex in myeloid cells. Binding of mycobacterial trehalose 6,6'-dimycolate (TDM) to this receptor complex leads to

phosphorylation of the immunoreceptor tyrosine-based 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. Specifically recognizes alpha-mannose residues on pathogenic fungi of the genus Malassezia and mediates macrophage activation. Through recognition of DAMPs released upon nonhomeostatic cell death, enables immune sensing of damaged self and promotes inflammatory cell infiltration into the damaged tissue (By

similarity).[UniProtKB/Swiss-Prot Function]