

## Product datasheet for **RN200562**

### Clec4e (NM\_001005897) Rat Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Clec4e (NM\_001005897) Rat Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Clec4e  
**Synonyms:** Clecsf9; Mincle  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >RN200562 representing NM\_001005897  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGAATCAACCAATCGCTGCATCACACCACACAGAGAGAATGCTTCAAAAACCTCCAAGTGCTTT  
 CATGGACGATGGCTGGGCCTCCATCCTGTTTCTCAGTGTCTGTTTCATCACCAGATGTGTGTAACATA  
 TCACAGTTTTCAAATTTATGGGCAGAAGAAGTTACAGCCACATAAACTATTAAGGAGCTTCTCTGCTAC  
 CTTGAAGCATCAGTTTCAGTCAAGAATTGCTGCCCTTTGAACTGGAAACATTTTCAGTCTAGTTGCTACT  
 TTTTCTCTACAACCACCTTATCCTGGCTATCAAGTCTAAAGAATTGCTCAGACATGGGGGCTCACCTGGT  
 GGTATCAACACATGGGAAGAGCAGGAATTCCTTTTTTCGCACAAAACCCAGAAAGAAAGATTTTACATT  
 GGACTGACAGACCAGTTGTGGAGGGTCAGTGGCGATGGGTGGATGATACACCTTTCACAGAGTCCCTGA  
 GCTTCTGGGATGCTGGAGAGCCCAATAACATAGTTTTTGTGGAGGACTGTGCCACCATGAGGGACTCTTC  
 AAACCCAGGAAGAAGTGAATGATGTATCCTGTTTCTTCAGTATGCCTTGATTTGTGAGATGCCAGAA  
 ATAAGTCTTTGGACT**AG**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001005897  
**Insert Size:** 648 bp



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<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_001005897.1</a></u> , <u><a href="#">NP_001005897.1</a></u>
<b>RefSeq Size:</b>	730 bp
<b>RefSeq ORF:</b>	648 bp
<b>Locus ID:</b>	450223
<b>UniProt ID:</b>	<u><a href="#">Q67EQ1</a></u>
<b>Cytogenetics:</b>	4q42
<b>Gene Summary:</b>	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]