

Product datasheet for TP502353

OriGene Technologies, Inc.

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Clec4e (NM 019948) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse C-type lectin domain family 4, member e (Clec4e), with

C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse

Expression Host: HEK293T

Expression cDNA Clone

>MR202353 protein sequence

or AA Sequence: Red=Cloning site Green=Tags(s)

MNSTKSPASHHTERGCFKNSQVLSWTIAGASILFLSGCFITRCVVTYRSSQISGQNLQPHRNIKELSCYS EASGSVKNCCPLNWKHYQSSCYFFSTTTLTWSSSLKNCSDMGAHLVVIDTQEEQEFLFRTKPKRKEFYIG LTDQVVEGQWQWVDDTPFTESLSFWDAGEPNNIVLVEDCATIRDSSNSRKNWNDIPCFYSMPWICEMPEI

SPLD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK

Predicted MW: 24.4 kDa

Concentration: >0.05 μg/μL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 064332

Locus ID: 56619

UniProt ID: Q9R0Q8, Q4FK29

RefSeg Size: 2519





Clec4e (NM_019948) Mouse Recombinant Protein - TP502353

Cytogenetics: 6 58.35 cM

RefSeq ORF: 645

Synonyms: C86253; Clecsf9; Mincle

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 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

(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]