

## Product datasheet for MR202488

### Clec4d (NM\_001163161) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Clec4d (NM_001163161) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Clec4d
Synonyms:	Clecsf8; mcl; Mpcl
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR202488 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTGGCTGGAAGAATCCCAAATGAAATCAAAGGTACCCGACATCCCCAACTGATCCCTTGCCTTTCG  
CTGTTGTTCCATCTCGTTCCTTAGTGCTTGTATTTCAACTGTTTGGTGACTCATCTACTTTTT  
ACGCTGGACGAGAGGAAGTGTGGTAAACTGTCAGACTACCACACGAGAGTAACGTGCATCCGAGAGGAG  
CCACAGCCTGGAGCTACAGGAGTACTTGGACCTGCTGCTGTTAGCTGGAGAGCCTTCCAGTCTAACT  
GTTACTTTCTCTTAATGACAACCAGACCTGGCATGAGAGCGAGAGGAAGTCTCAGGGATGAGCAGTCA  
TCTGGTGACCATCAACACCGAAGCAGAACAATTTTGTACCCAGCTTTTGGATAAACGGTTTTCTTAT  
TTCTGGGACTTGTCTGATGAGAATGTGGAAGGCCAATGGCAGTGGGTGGACAAGACGCCATTTAACCCAC  
ACACGGTATTCTGGGAAAAGGGGAATCCAATGACTTTATGGAAGAAGACTGTGTTGTCCTTGTTCATGT  
CCATGAAAAATGGGTCTGGAATGACTTTCCTTGTCACTTTGAGGTGAGAAGGATTTGAAATTACCTGGA  
ATAACATTCAATTGGAAGCCCTCGAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR202488 protein sequence  
Red=Cloning site Green=Tags(s)

MWLEESQMKSKGTRHPQLIPCVFAVVSISFLSACFISTCLVTHHYFLRWTRGSVVKLSDYHTRVTCIREE  
 PQPGATGGTWTCCPVSWRAFQSNCFPLNDNQTWHESERNCSGMSSHLVTINTEAEQNFVTQLLDKRFSY  
 FLGLADENVEGQWQWVDKTPFNPHTVFWEKGESNDFMEEDCVVLVHVHEKWWNDFPCHFVRRICKLPG  
 ITFNWKPSK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001163161

**ORF Size:** 660 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:** [NM\\_001163161.1](#), [NP\\_001156633.1](#)

**RefSeq Size:** 1333 bp

**RefSeq ORF:** 657 bp

**Locus ID:** 17474

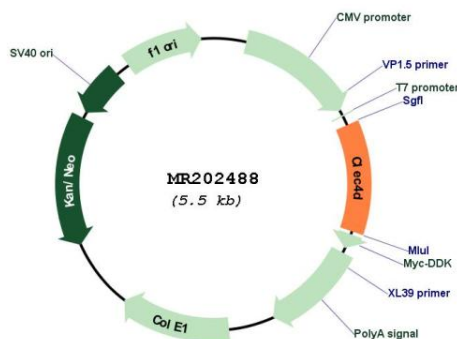
**UniProt ID:** [Q9Z2H6](#)

**Cytogenetics:** 6 58.33 cM

**MW:** 25.6 kDa

**Gene Summary:** A calcium-dependent lectin involved in innate recognition of pathogen-associated molecular patterns (PAMPs). Interacts with signaling adapter Fc receptor gamma chain/FCER1G, likely via CLEC4E, to form a functional complex in antigen presenting 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 (PubMed:23602766). Functions as an endocytic receptor. May be involved in antigen uptake at the site of infection, either for clearance of the antigen, or for processing and further presentation to T-cells (By similarity).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR202488