

## Product datasheet for RC220055

### CD68 (NM\_001040059) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CD68 (NM_001040059) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CD68
Synonyms:	GP110; LAMP4; SCARD1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220055 representing NM_001040059 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGGCTGGCTGTGCTTTTCTCGGGGCCCTGCTGGGGCTACTGGCAGAGAGCACTGGAACAACCAGCC  
ACAGGACTACCAAGAGCCACAAAACCACCACTCACAGGACAACCACCACAGGCACCACCAGCCACGGACC  
CACGACTGCCACTCACAACCCACCACCAGCCATGGAAACGTCACAGTTCATCCAACAAGCAATAGC  
ACTGCCACCAGCCAGGGACCCTCAACTGCCACTCACAGTCTGCCACCACTAGTCATGGAATGCCACGG  
TTCATCCAACAAGCAACAGCACTGCCACCAGCCAGGATTCACCAGTTCTGCCACCCAGAACCACCTCC  
ACCTCTCCGAGTCTTAGCCCAACCTCCAAGGAGACCATTGGAGACTACACGTGGACCAATGGTTCCAG  
CCCTGTGTCCACCTCCAAGCCCAGATTCAGATTCGAGTCATGTACACAACCCAGGGTGGAGGAGAGGCC  
GGGGCATCTGTACTGAACCCCAAAAACCAAGGTCCAGGGAAGCTGTGAGGGTGCCCATCCCCACCT  
GCTTCTCTCATTCCCCTATGGACACCTCAGCTTTGGATTCATGCAGGACCTCCAGCAGAAGGTTGTCTAC  
CTGAGCTACATGGCGGTGGAGTACAATGTGCTTCCCCACGCAGCACAGTGGACATTCCTCGGCTCAGA  
ATGCATCCCTTCGAGATCTCAAGCACCCCTGGGGCAGAGCTTCAGTTCAGCAACTCGAGCATCATTCT  
TTCACCAGCTGTCCACCTCGACCTGCTCTCCCTGAGGCTCCAGGCTGCTCAGTGCCTCATCATCGGCTGATCCTT  
TTGGCCAAAGTTTCTCCTGCCAGTGACCGGTCCATCTTGCTGCCTCATCATCGGCTGATCCTTC  
TTGGCCTCTCGCCCTGGTGCTTATTGCTTTCTGCATCATCCGGAGACGCCCATCCGCTACCAGGCCCT  
C

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC220055 representing NM\_001040059  
Red=Cloning site Green=Tags(s)

MRLAVLFSGALLGLLAESTGTTSHRTTKSHKTTTHRTTTTGTTSHGPTTATHNPTTTS HGNVTVHPTSNS  
TATSQGPSTATHSPATTSHGNATVHPTSNSSTATSPGFTSSAHPEPPPPSPSPSPTSKETIGDYWTNGSQ  
PCVHLQAQIQIRVMTTQGGGEAWGISVLNPNKTKVQGSCEGAHPHLLL SFPYGHLSFGFMQDLQKVVY  
LSYMAVEYNVSPHAAQWTF SAQNASLRDLQAPLGQSFSCSNSSIILSPAVHLDLLSLRLQAAQLPHTGV  
FGQSFSCPSDRSILLPLIIGLILLGLLALVLI AF CI IRRRPSAYQAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8052\\_e01.zip](https://cdn.origene.com/chromatograms/mk8052_e01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_001040059

**ORF Size:** 981 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\\_001040059.2](#)

**RefSeq Size:** 1790 bp

**RefSeq ORF:** 984 bp

**Locus ID:** 968

**UniProt ID:** [P34810](#)

**Cytogenetics:** 17p13.1

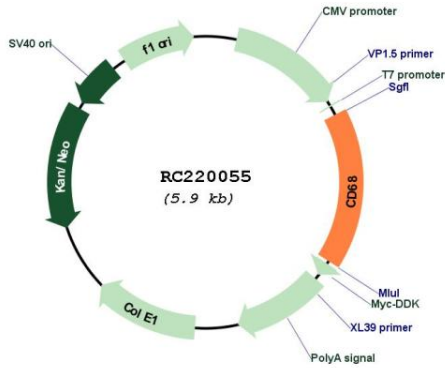
**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Lysosome

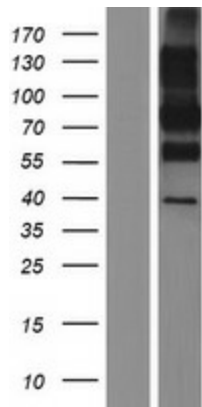
**MW:** 34.5 kDa

**Gene Summary:** This gene encodes a 110-kD transmembrane glycoprotein that is highly expressed by human monocytes and tissue macrophages. It is a member of the lysosomal/endosomal-associated membrane glycoprotein (LAMP) family. The protein primarily localizes to lysosomes and endosomes with a smaller fraction circulating to the cell surface. It is a type I integral membrane protein with a heavily glycosylated extracellular domain and binds to tissue- and organ-specific lectins or selectins. The protein is also a member of the scavenger receptor family. Scavenger receptors typically function to clear cellular debris, promote phagocytosis, and mediate the recruitment and activation of macrophages. Alternative splicing results in multiple transcripts encoding different isoforms. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC220055



Western blot validation of overexpression lysate (Cat# [LY421888]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220055 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).