

Product datasheet for **RC204686**

MD2 (LY96) (NM_015364) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: MD2 (LY96) (NM_015364) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: LY96
Synonyms: ESOP-1; ly-96; MD-2; MD2
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC204686 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGTTACCATTCTGTTTTTTCCACCCTGTTTTCTTCCATTTACTGAAGCTCAGAAGCAGTATTGGG
TCTGCAACTCATCCGATGCAAGTATTTACACCTACTGTGATAAAATGCAATACCCAATTTCAATTAA
TGTTAACCCCTGTATAGAATTGAAAGGATCCAAAGGATTATTGCACATTTCTACATTCCAAGGAGAGAT
TAAAGCAATTATATTTCAATCTCTATATAACTGTCAACACCATGAATCTTCAAAGCGCAAAGAAGTTA
TTTGCCGAGGATCTGATGACGATTACTCTTTTTGCAGAGCTCTGAAGGGAGAGACTGTGAATACAACAAT
ATCATTCTCTTCAAGGGAATAAAATTTCTAAGGGAAAATACAAATGTGTTGTTGAAGCTATTTCTGGG
AGCCCAGAAGAAATGCTCTTTTGCTTGGAGTTTGTATCTACACCAACCTAATTCAAAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC204686 protein sequence
Red=Cloning site Green=Tags(s)
MLPFLFFSTLFSSIFTEAQKQYWVCNSSDASISYTYCDKMQYPIVINVNPICIELKGSKGLLHIFYIPRRD
LKQLYFNLYITVNTMNLPKRKEVICRGSDDDYFCRALKGETVNTTISFSFKGIKFSKGYKCVVEAISG
SPEEMFLCLEFVILHQPNSN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

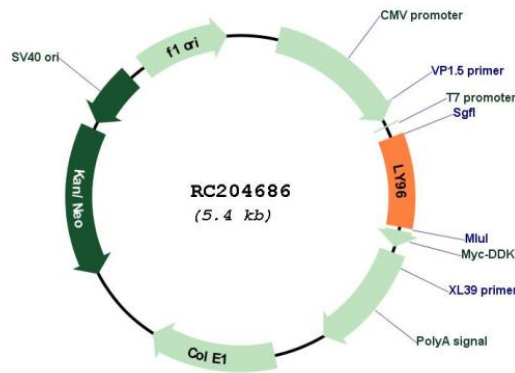
Chromatograms: https://cdn.origene.com/chromatograms/mk6233_a07.zip

Restriction Sites: SgfI-MluI



[View online >](#)

Cloning Scheme:

Plasmid Map:


ACCN: NM_015364

ORF Size: 480 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_015364.4](#)

RefSeq Size: 642 bp

RefSeq ORF: 483 bp

Locus ID: 23643

UniProt ID: [Q9Y6Y9](#)

Cytogenetics: 8q21.11

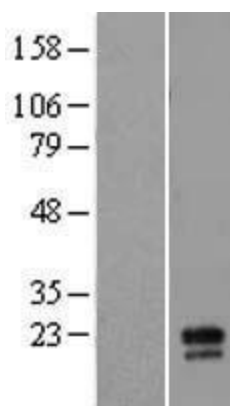
Protein Families: Secreted Protein

Protein Pathways: Pathogenic Escherichia coli infection, Toll-like receptor signaling pathway

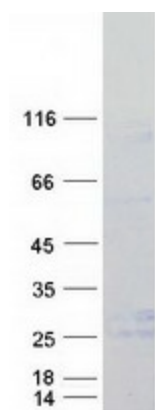
MW: 18.4 kDa

Gene Summary: This gene encodes a protein which associates with toll-like receptor 4 on the cell surface and confers responsiveness to lipopolysaccharide (LPS), thus providing a link between the receptor and LPS signaling. Studies of the mouse ortholog suggest that this gene may be involved in endotoxin neutralization. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Sep 2010]

Product images:



Western blot validation of overexpression lysate (Cat# [LY414593]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204686 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified LY96 protein (Cat# [TP304686]). The protein was produced from HEK293T cells transfected with LY96 cDNA clone (Cat# RC204686) using MegaTran 2.0 (Cat# [TT210002]).