

Product datasheet for **RG230968**

MD2 (LY96) (NM_001195797) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: MD2 (LY96) (NM_001195797) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: LY96
Synonyms: ESOP-1; ly-96; MD-2; MD2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG230968 representing NM_001195797
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTTACCATTCTGTTTTTTCCACCCTGTTTTCTTCCATTTACTGAAGCTCAGAAGCAGTATTGGG
 TCTGCAACTCATCCGATGCAAGTATTTCAACCTACTGTGGGAGAGATTTAAAGCAATTATTTCAA
 TCTCTATAAAGTGTCAACACCATGAATCTTCAAAGCGCAAAGAAGTTATTTGCCGAGGATCTGATGAC
 GATTACTCTTTTGCAGAGCTCTGAAGGGAGAGACTGTGAATACAACAATATCATTCTCCTTCAAGGGAA
 TAAAATTTCTAAGGGAAAATACAAATGTGTTGTTGAAGCTATTCTGGGAGCCCAAGAAGAAATGCTCTT
 TTGCTTGAGATTTGTCATCCTACACCAACCTAATTCAAAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG230968 representing NM_001195797
 Red=Cloning site Green=Tags(s)
 MLPFLFFSTLFFSSIFTEAQKQYWCNSSDASISYTYCGRDLKQLYFNLYITVNTMNLPKRKEVICRGSDD
 DYSFCRALKGETVNTTISFSFKGIKFSKGKYKCVVEAISGSPEEMLFCLFVILHQPNSN

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001195797.1](#), [NP_001182726.1](#)

RefSeq Size: 552 bp

RefSeq ORF: 393 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

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]