

Product datasheet for **RG237266**

MDH2 (NM_001282403) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | MDH2 (NM_001282403) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | MDH2 |
| Synonyms: | DEE51; EIEE51; M-MDH; MDH; MGC:3559; MOR1 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| ORF Nucleotide Sequence: | >RG237266 representing NM_001282403. Blue=ORF Red=Cloning site Green=Tag(s) |

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GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
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CACATCGAGACCAAGCCGCTGTGAAAGGCTACCTCGGACCTGAACAGCTGCCTGACTGCCTGAAAGGT
TGTGATGTGGTAGTTATCCGGCTGGAGTCCCCAGAAAGCCAGGCATGACCCGGGACGACCTGTTCAAC
ACCAATGCCACGATTGTGGCCACCCTGACCCTGCCTGTGCCAGCACTGCCCGAAGCCATGATCTGC
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ACTGGGCGGATCCAGGAGCCGGCACGGAGGTGGTCAAGGCTAAAGCCGGAGCAGGCTCTGCCACCTC
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AAAAAGGCATCGAGAAGAACCTGGGCATCGGCAAAGTCTCTCTTTGAGGAGAAGATGATCTCGGAT
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
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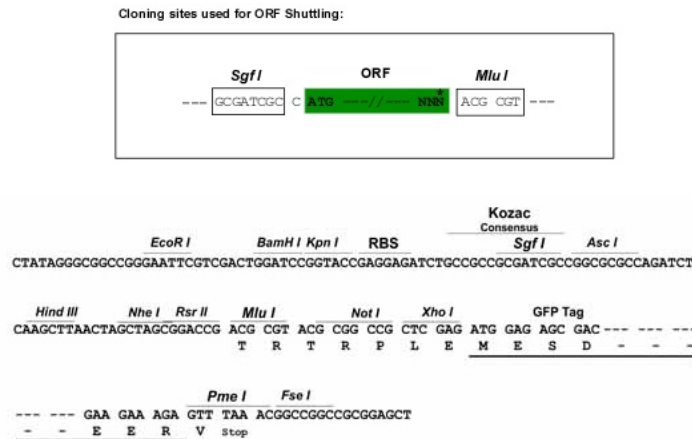
[View online »](#)

Protein Sequence: >Peptide sequence encoded by RG237266
 Blue=ORF Red=Cloning site Green=Tag(s)

MLSALARPASAALRRSFSTSAQNNKAVVLGASGGIGQPLSLLLKNSPLVSRLTLYDIAHTPGVAADLS
 HIETKAAVKGYLGPEQLPDCLKGCDVVVIPAGVPRKPGMTRDDL FNTNATIVATLTAACAQHCPEAMIC
 VIANPGLDPA RVNVPVIGGHAGKTI IPLISQCTPKVDFPQDQLTALTGRIQEAGTEVVKAKAGAGSATL
 SMAYAGARFVFSLV DAMNGKEGVVECSFVKSQTECTYFSTPLLLGKKGIEKNLGI GKVSSFEEMISD
 AIPELKASIKKGEDFVKTLK
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV
 MGYGFYHFGTYP SGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPEL
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001282403

ORF Size: 888 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).

RefSeq: [NM_001282403.2](#)

RefSeq Size: 2142 bp

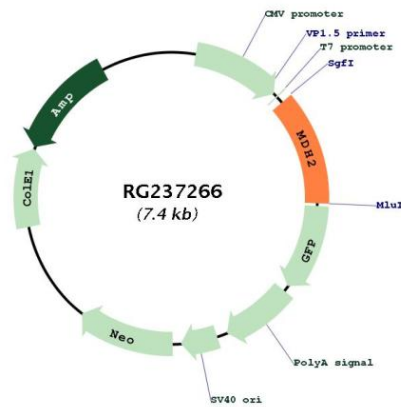
RefSeq ORF: 891 bp

Locus ID: 4191
UniProt ID: [P40926](#)
Cytogenetics: 7q11.23
Protein Families: Druggable Genome
Protein Pathways: Citrate cycle (TCA cycle), Glyoxylate and dicarboxylate metabolism, Metabolic pathways, Pyruvate metabolism

MW: 31.3 kDa

Gene Summary: Malate dehydrogenase catalyzes the reversible oxidation of malate to oxaloacetate, utilizing the NAD/NADH cofactor system in the citric acid cycle. The protein encoded by this gene is localized to the mitochondria and may play pivotal roles in the malate-aspartate shuttle that operates in the metabolic coordination between cytosol and mitochondria. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2013]

Product images:



Circular map for RG237266