

Product datasheet for **SC320052**

MDH2 (NM_005918) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: MDH2 (NM_005918) Human Untagged Clone
Tag: Tag Free
Symbol: MDH2
Synonyms: DEE51; EIEE51; M-MDH; MDH; MGC:3559; MOR1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC (PS100020)
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_005918.2
 GCCAGTCGGTGCCCTCCCGCTCCAGCCATGCTCTCCGCCCTCGCCCGCCTGTGACGCC
 TGCTCTCCGCCGAGCTTCAGCACCTCGGCCAGAACAAATGCTAAAGTAGCTGTGCTAGG
 GGCTCTGGAGGCATCGGGCAGCCACTTCACTTCTCCTGAAGAACAGCCCTTGGTGAG
 CCGCCTGACCCTCTATGATATCGCGCACACCCGGAGTGGCCGAGATCTGAGCCACAT
 CGAGACCAAAGCCGCTGTGAAAGGCTACCTCGACCTGAACAGCTGCCTGACTGCCTGAA
 AGGTTGTGATGTGGTAGTTATTCGGCTGGAGTCCCCAGAAAGCCAGGCATGACCCGGGA
 CGACCTGTTCAACACCAATGCCACGATTGTGGCCACCCTGACCGCTGCCTGTGCCAGCA
 CTGCCCGAAGCCATGATCTGCGTCATTGCCAATCCGGTTAATCCACCATCCCCATCAC
 AGCAGAAGTTTTCAAGAAGCATGGAGTGTACAACCCCAACAAAATCTTCGGCGTGACGAC
 CCTGGACATCGTCAGAGCCAACACCTTTGTTGCAGAGCTGAAGGGTTTGGATCCAGCTCG
 AGTCAACGTCCTGTGCTATTGGTGGCCATGCTGGGAAGACCATCATCCCCCTGATCTCTCA
 GTGACACCCCAAGGTGGACTTTCCCCAGGACCAGCTGACAGCACTCACTGGGCGGATCCA
 GGAGGCCGGCACGGAGGTGGTCAAGGCTAAAGCCGGAGCAGGCTCTGCCACCCTCTCCAT
 GGCGTATGCCGGCAGCCGCTTTGTCTTCTCCCTTGTGGATGCAATGAATGGAAAGGAAGG
 TGTTGTGGAATGTTCTTTCGTTAAGTACAGGAAACGGAATGTACCTACTTCTCCACACC
 GCTGCTGCTTGGGAAAAAGGGCATCGAGAAGAACCTGGGCATCGGCAAAGTCTCCTCTTT
 TGAGGAGAAGATGATCTCGGATGCCATCCCCGAGCTGAAGGCCTCCATCAAGAAGGGGA
 AGATTTTCGTGAAGACCTGAAGTGAGCCGCTGTGACGGGTGCCAGTTTCTTAATTTAT
 GAAGGCATCATGTCACTGCAAAGCCGTTGCAGATAAACTTTGTATTTAATTTGCTTTGG
 TGATGATTACTGTATTGACATCATCATGCCTTCCAAATTGTGGGTGGCTCTGTGGGCGCA
 TCAATAAAAGCCGTCCTTGATTTTAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: Please inquire
ACCN: NM_005918



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| OTI Disclaimer: | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP). |
| OTI Annotation: | This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA. |
| 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: | <ol style="list-style-type: none"> 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: | <u>NM_005918.2</u> , <u>NP_005909.2</u> |
| RefSeq Size: | 1321 bp |
| RefSeq ORF: | 1017 bp |
| Locus ID: | 4191 |
| UniProt ID: | <u>P40926</u> |
| Cytogenetics: | 7q11.23 |
| Domains: | ldh |
| Protein Families: | Druggable Genome |
| Protein Pathways: | Citrate cycle (TCA cycle), Glyoxylate and dicarboxylate metabolism, Metabolic pathways, Pyruvate metabolism |
| Gene Summary: | <p>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]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).</p> |