

Product datasheet for **SC202354**

MDH1 (NM_005917) Human 3' UTR Clone

Product data:

Product Type:	3' UTR Clones
Product Name:	MDH1 (NM_005917) Human 3' UTR Clone
Vector:	pMirTarget (PS100062)
Symbol:	MDH1
Synonyms:	DEE88; EIEE88; HEL-S-32; KAR; MDH-s; MDHA; MGC:1375; MOR2
ACCN:	NM_005917
Insert Size:	240 bp
Insert Sequence:	>SC202354 3'UTR clone of NM_005917 The sequence shown below is from the reference sequence of NM_005917. The complete sequence of this clone may contain minor differences, such as SNPs. Blue =Stop Codon Red =Cloning site GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAAGCCAAGAAGGGCGGAAAGATCGCCGTG TAACAATTGGCAGAGCTCAGAATTCAAGCGATCGCC AGTGCTTTTGAATTTCTTCTCTGCTGACTAGACAATGATGTTACTAAATGCTTCAAAGCTGAAGAA TCTAAATGTCGCTTTGACTCAAGTACCAATAATAATAATGCTATACTTAAATTCTTGTAAGAAACA ACACATTTTAAAGATTACGTGCTTCTTGGTACAGTTTGTGAATGACAGTTTATCGTCATGCTGTTAGT GTGCATTCTAAATAAATATATATTCAAATGAAA ACGCGT AAGCGGCCGCGCATCTAGATTGAAGAAAATGACCGACCAAGCGACGCCCAACCTGCCATCA CGAGATTCGATTCCACCGCCCTTCTATGAAAGG
Restriction Sites:	SgfI-MluI
OTI Disclaimer:	Our molecular clone sequence data has been matched to the sequence identifier above as a point of reference. Note that the complete sequence of this clone is largely the same as the reference sequence but may contain minor differences, e.g., single nucleotide polymorphisms (SNPs).
Components:	The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The package also includes 100 pmols of both the corresponding 5' and 3' vector primers in separate vials.
RefSeq:	NM_005917.4



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Summary:

This gene encodes an enzyme that catalyzes the NAD/NADH-dependent, reversible oxidation of malate to oxaloacetate in many metabolic pathways, including the citric acid cycle. Two main isozymes are known to exist in eukaryotic cells: one is found in the mitochondrial matrix and the other in the cytoplasm. This gene encodes the cytosolic isozyme, which plays a key role in the malate-aspartate shuttle that allows malate to pass through the mitochondrial membrane to be transformed into oxaloacetate for further cellular processes. Alternatively spliced transcript variants have been found for this gene. A recent study showed that a C-terminally extended isoform is produced by use of an alternative in-frame translation termination codon via a stop codon readthrough mechanism, and that this isoform is localized in the peroxisomes. Pseudogenes have been identified on chromosomes X and 6. [provided by RefSeq, Feb 2016]

Locus ID: 4190

MW: 9.4