

## Product datasheet for **TP300298M**

### MDH1 (NM\_005917) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human malate dehydrogenase 1, NAD (soluble) (MDH1), 100 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC200298 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)
	MSEPIRVLVTGAAGQIAYSLLYSIGNGSVFGKDQPIILVLLDITPMMGVLDGVLMEQLDQCALPLLKDVIA TDKEDVAFKDLVDVAILVGSMPRREGMERKDLLKANVKIFKSQGAALDKYAKKSVKVIWGNPANTNCLTA SKSAPSIPKENFSCLETRLDHNRKAQIALKLGVTANDVKNVWGNHSSTQYPDVNHAKVKLQKQKGVVY EALKDDSWLKGEFVTTVQQRGA AVIKARKLSSAMSAKAICDHVRDIWFGTPEGEFVSMGVISDGNSYGV PDDL LYSFPVVIKNTWK FVEGLPINDFSREKMDLTAKELTEEKESAFELSSA
	<b>TRTRPLEQKLISEEDLAANDILDYKDDDDKV</b>
Tag:	C-Myc/DDK
Predicted MW:	36.2 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u><a href="#">NP_005908</a></u>
Locus ID:	4190



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UniProt ID: [P40925](#), [V9HWF2](#)

RefSeq Size: 1665

Cytogenetics: 2p15

RefSeq ORF: 1002

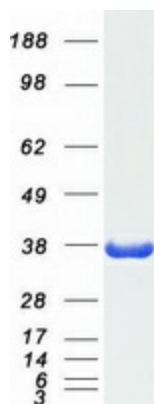
Synonyms: DEE88; EIEE88; HEL-S-32; KAR; MDH-s; MDHA; MGC:1375; MOR2

**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]

**Protein Families:** Druggable Genome

**Protein Pathways:** Citrate cycle (TCA cycle), Glyoxylate and dicarboxylate metabolism, Metabolic pathways, Pyruvate metabolism

### Product images:



Coomassie blue staining of purified MDH1 protein (Cat# [TP300298]). The protein was produced from HEK293T cells transfected with MDH1 cDNA clone (Cat# [RC200298]) using MegaTran 2.0 (Cat# [TT210002]).